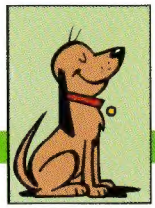
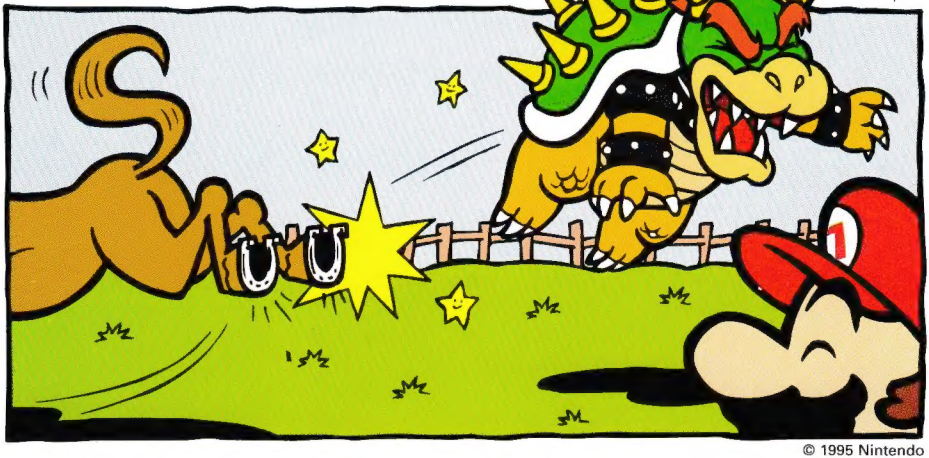
Why are horses shod?



DOMESTIC ANIMALS

1. To protect against infection
2. To prevent wear and damage to the hoof and inner sole.
3. To help them walk through mud without sinking



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Horseshoes

The horseshoe, a metal curve with holes for nails to go through, protects a horse's hoof from wear and the tender inner sole from damage.

2 Horses are shod to prevent their hooves from wearing away and to protect their inner soles from damage.

Photo Bland / Explorer

The shoe is heated before it is put on, so it sticks to the horny part of the hoof. Then it is nailed in place. Don't worry, it really doesn't hurt the horse.

Horseshoes help a horse grip the ground better. So they improve the horse's pulling power when it's harnessed to a wagon or a plow and help it gallop along a muddy track.

Horseshoe History

In the Roman Empire, horses' shoes weren't nailed on—they were like iron "socks" that covered the whole hoof. So if an army horse injured its foot, the animal would follow behind the soldiers while its foot healed inside the "sock."

Horseshoes first appeared in Europe in the 9th century, but didn't come into general use until the 12th century. From the 19th century on, horseshoes became essential because paved roads wore away the horn of a hoof much faster than the old dirt roads. Even today, horses that live in town have to visit a farrier—the person who makes and fits horseshoes—more often than do their country cousins.

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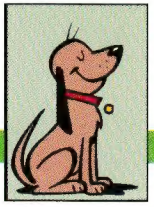
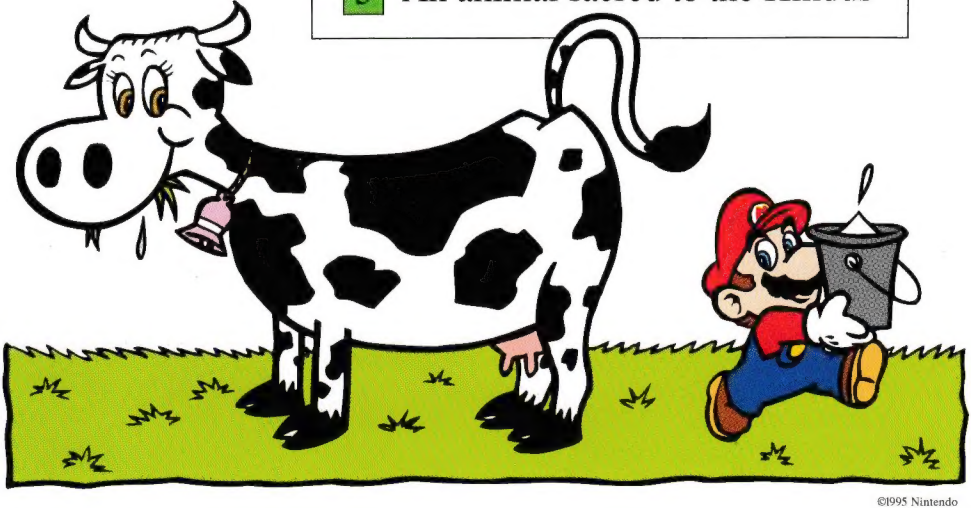
D3 054 01-09

What are ruminants?



DOMESTIC ANIMALS

1. Mammals that regurgitate grass they have swallowed
2. Stubborn animals
3. An animal sacred to the Hindus



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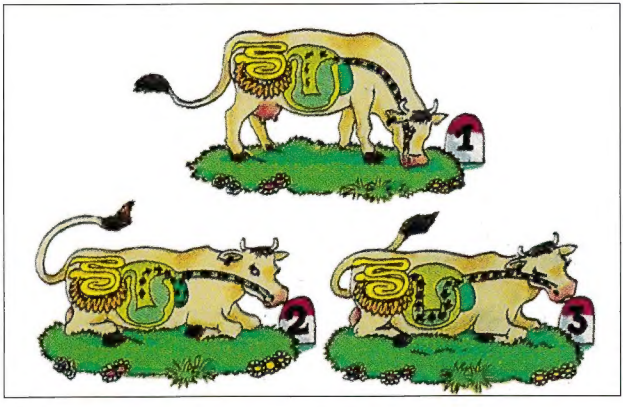
Ruminants

Cows are herbivores–plant eating animals and they're ruminants. They bring back up grass they've swallowed into their mouths and chew it a long time. Then they swallow it again.

1 A ruminant is an animal that regurgitates the grass it has swallowed.



Ill. Y. Taburés

Grazing, rumination, and digestion–the food route.

Cows graze for hours, eating lots of grass that they swallow without chewing. Then they ruminate.

The Grass Route

Grass, mixed with saliva, is stored in two pockets in the stomach, the paunch and the reticulum. In these storerooms, microbes break down the grass, then it's regurgitated into the mouth and chewed.

After several journeys between mouth and paunch, the grass is reduced to a thick, soupy consistency. Then it passes directly into a third section, the omasum, and then into the abomasum, where it's digested by the chemical effect of digestive sugars. And all this happens while the cow just lies in the grass.

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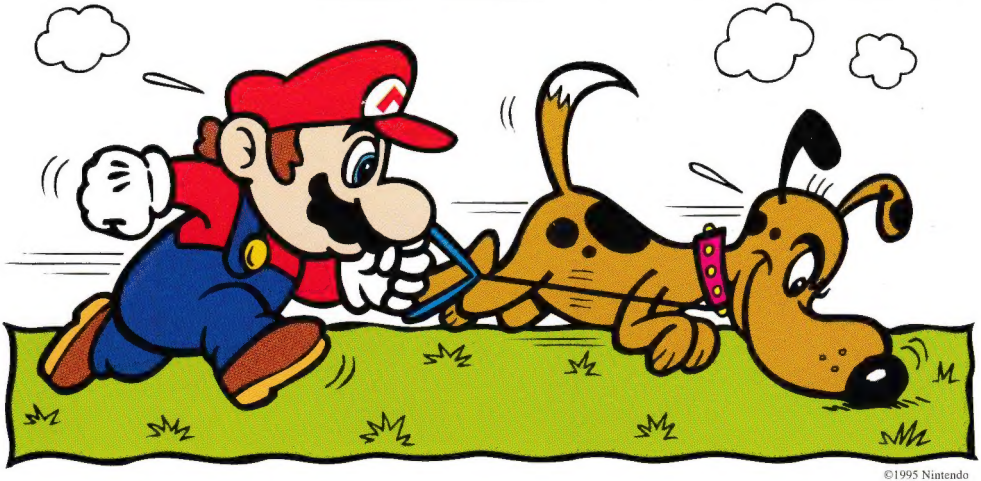
D3 054 03-03

How does a dog follow a trail?

DOMESTIC ANIMALS

1. By using its sharp sense of sight
2. By using its keen sense of smell
3. By using its exceptional sense of hearing



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Dog

Whether it has a short or long snout, a dog's sense of smell is much better than a human's. A combination of nose and brain give a dog an uncanny ability to sniff out clues!

2 A dog follows a trail by using its keen sense of smell.

Photo © Delarbre / Explorer

Customs officers use a dog's sniff-ability to search for any illegal drugs smuggled inside luggage.

A dog has a keen sense of smell. It can detect the tiniest trace of odor in the air. It also recognizes subtle differences between two odors that humans think smell the same. And a dog can identify a person by his/her footprints—not by looking at the prints, but by sniffing them. That's because we each have a different and distinct odor.

The Nose Knows

The tip of a dog's nose is always moist and overly-sensitive to invisible fumes in the air. Millions of cells inside the animal's nostrils pick up each scent. Humans have about 5 million scent-sensing cells in their nostrils; German shepherds have more than 200 million! Also, the part of a dog's brain used to analyze scents is proportionally larger than that of a human. That's why police use dogs to track suspects or find missing people. The animals zero in on the scent and let nothing distract them.

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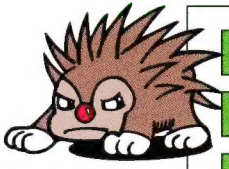
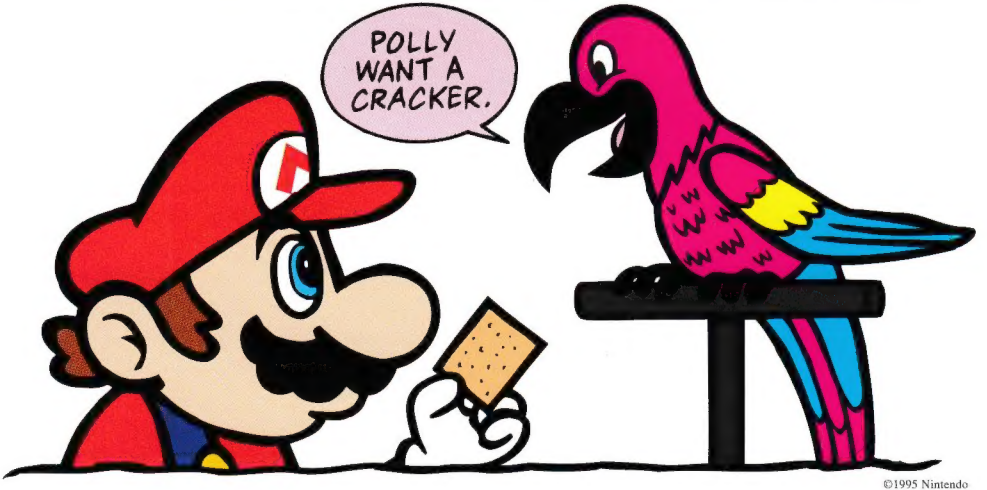
D2 491 05-04

Do parrots really talk?

DOMESTIC ANIMALS



1. Yes, they can carry on long conversations
2. Yes, they can learn to repeat some words
3. No, their cries just sound like certain words



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Parrots

In the wild, parrots only make bird noises like their flock-mates. They only "talk" in captivity, by imitating the human voice.

2 Yes, parrots can learn to repeat some words.

Photo © Moiton / Explorer

The term parakeet is reserved for small parrots with long pointed tails that live in Africa, India, Malaysia, and Australia.

Some parrots know how to imitate the human voice, so they really can talk. But they can't carry on a conversation like a human. They can only learn to repeat what has been said to them.

The Jaco

The gray parrot, or jaco, is considered by many to be the most intelligent and talented parrots for learning speech. It can learn to say "good morning" or "good evening," depending upon the time of the day, can ask for food when it's hungry, and can greet each member of the family by his/her own name. The gray doesn't just imitate the human voice; it also knows how to whistle, meow, and bark! This particular species has a good memory that allows a bird to learn some rather long sentences and repeat each of them without mistake! The male jaco is generally more gifted than the female, when it comes to talking. A gentle and loving jaco makes a good companion.

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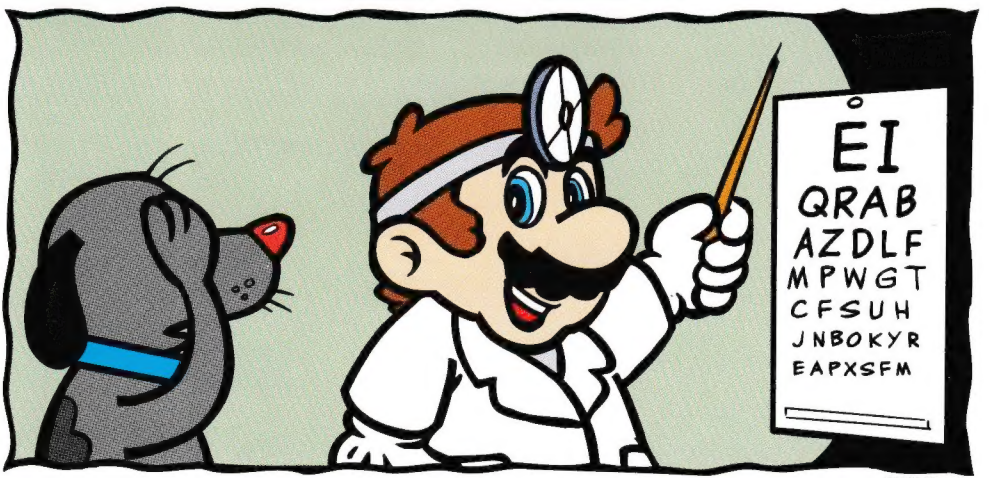
D2 491 05-15

Is a dog's vision like a human's?

DOMESTIC ANIMALS

1 No, dogs see the world differently than humans

2 Yes, dogs see and distinguish things exactly as humans do



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Dogs and Sight

A dog's eyes are different from a human's, so it sees the world differently. Dogs don't rely on sight as humans do. A dog also uses its super sense of smell to recognize things in its environment.

1 No, dogs see the world differently than humans.

Photo © Kord/Explorer

A dog's eyes are located on either side of its nose, the primary sense organ used by the animal to recognize things in its environment.

A dog doesn't see the world as we do. The animal's field of vision is much wider than ours, but its eyes are only about 19 inches (50 cm) off the ground. So bushes or a row of cars can block the horizon from a dog's sight!

The Big Picture

When looking at an outdoor scene, a human's eyes scan the panorama and take in every detail. But a dog's eyes are immediately drawn to anything that moves—a bird, person, ball, or bike. No motion escapes the dog's attention, that's why it makes such a good hunter.

In Living Color

A human looks at the world and sees a multi-colored environment. But to a dog, green, yellow, orange, and red look like the same color, and some objects appear to be surrounded by a hazy gray mist. The dog's eyes do adjust to the dark better than a human's, however, allowing light in to make it easier for the animal to see at night.

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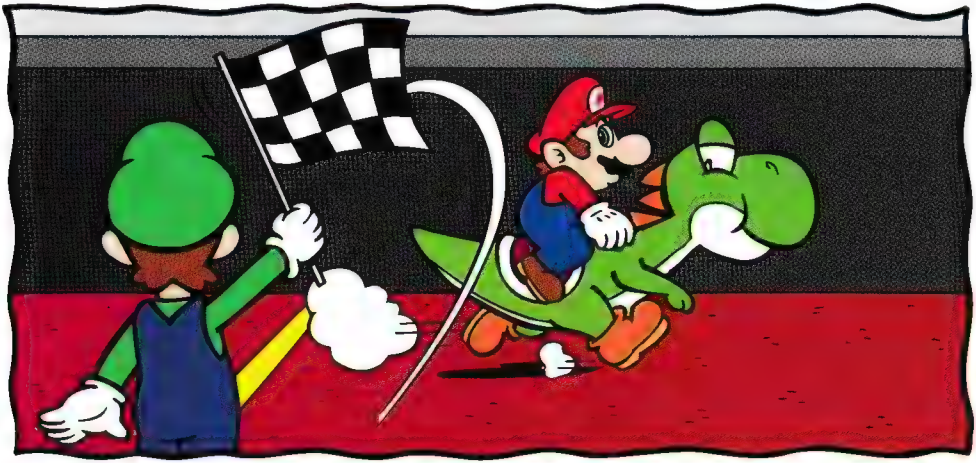
D2 491 06-02

What is the Triple Crown of horse racing?

DOMESTIC ANIMALS

1. The name of the first horse to win a race
2. The Kentucky Derby, Preakness, and Belmont Stakes
3. Queen Elizabeth's horse



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Horse Racing

Horse racing is a popular spectator sport worldwide. In the U.S., three top races, known as the Triple Crown of horse racing, are the Kentucky Derby, Preakness, and Belmont Stakes.

2 **The three races known as the Triple Crown are the Kentucky Derby, Preakness, and Belmont Stakes.**

Photo © NYRA Photo

Many horses have tried, but only 11 in all have won the Triple Crown.

Most horse races are stake races in which fees paid by horse owners are added to the purse, or prize money. The owner of the winning horse gets most of the purse, but other owners also receive shares. Most of the famous stakes races in the world were started between the late 1700s and the late 1800s.

The Triple Crown

In the U.S., the Belmont Stakes was first held in 1867. The Preakness was first run in 1873, and the Kentucky Derby debuted in 1875. Every thoroughbred racehorse owner dreams of someday having a horse win all three races in one year to capture the Triple Crown. In 1919, Sir Barton became the first horse to win the Triple Crown. Since then there have been only 11 three-year-olds to cross the finish line first in all three races.

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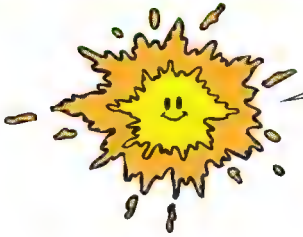
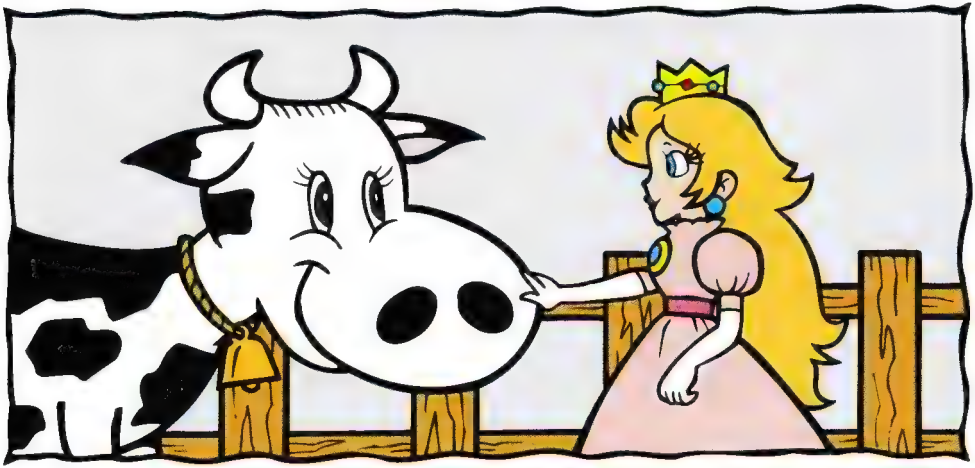
D3 054 08-13

What does a cow need in order to produce milk?

DOMESTIC ANIMALS



1. It must have a calf
2. It must eat special herbs
3. It must drink a bucket of water daily



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Milk

Like all mammals, cows secrete milk to feed their young. So to produce milk, a cow must first give birth to a calf.

1 A cow must have a calf in order to produce milk.

Photo © A. Legarc / Vermont Travel Division

During its lifetime, the average dairy cow has 4 or 5 calves and produces about 5,200 gallons (20,000 liters) of milk.

A cow can't produce milk unless it has given birth to a calf. The cow, then known as a "fresh" cow, usually gives milk for about 10 months. Since a cow usually has a calf every year, each cow's period of milk-giving lasts about 300 days yearly. In order to collect the milk from the cow, dairy farmers must take away her calf when it's eight days old and feed it an artificial milk.

Big Business

Producing milk for human consumption is a business. To improve milk production, dairy farmers raise breeds that produce the most milk, like Holsteins, and they carefully monitor their feeding. The average dairy cow eats 3 pounds (1.4 kg) of feed a day for every 100 pounds (45 kg) of its body weight. A good milker provides nearly 32 quarts (30 liters) of milk a day. After five or six years, the cow may be too old to have a calf, so can no longer give milk.

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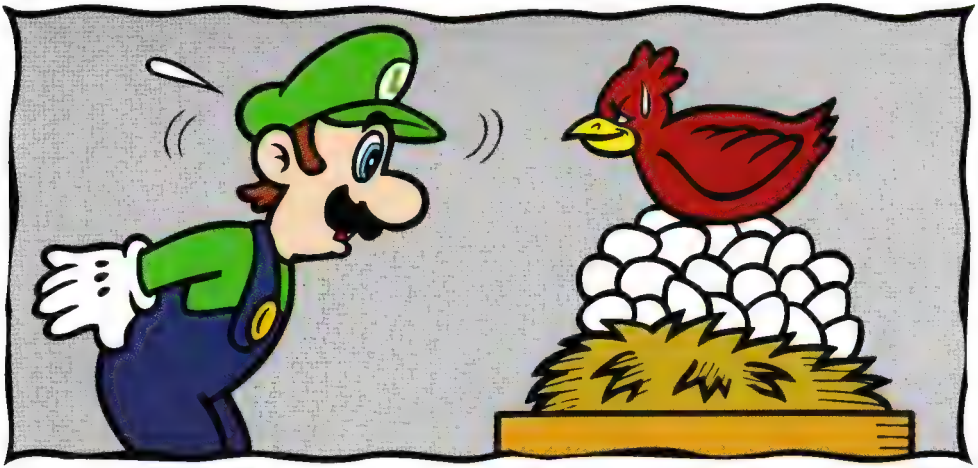
How many eggs does a hen lay per year?

DOMESTIC ANIMALS

1. Between 100-120
2. Between 150-200
3. 365 eggs



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Chickens

Chickens are birds, and like other birds, they lay eggs. Some female chickens—hens—are raised specifically to produce eggs for human consumption.

2 A hen lays from 150-200 eggs per year.

Photo © Houvenin / Explorer

Workers in the egg industry constantly try to improve the productivity of their hens to supply eggs for consumers.

Some hens are raised to produce chicks, others to produce eggs. Those that provide chicks lay fewer than the 150-200 eggs laid by those that provide eggs.

Lighten Up!

In winter, when the days become shorter, hens lay less often: Egg-laying ability is better if a hen receives a certain number of hours of light per day. So in the egg industry, farmers use electric lights to fool the hens and get maximum egg production all year. It takes about 25-26 hours for a hen to produce one egg. And from time to time, the hen doesn't produce an egg for a day or two. That's why in a 365-day year, a hen only lays 150-200 eggs.

EGG-xactly!

Many people use an average of 4-5 eggs a week, or 208-260 eggs a year. That's more eggs than a hen can produce in one year!

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D3 054 10-19

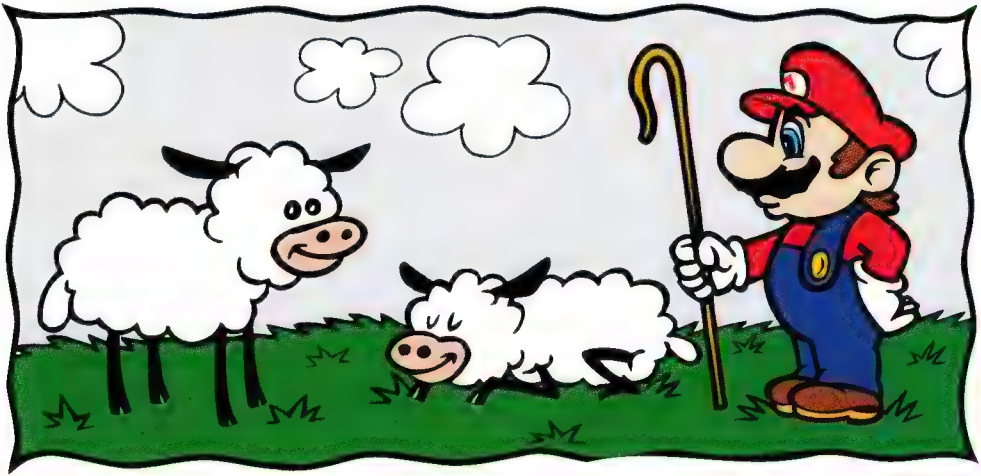
What is a merino?

DOMESTIC ANIMALS

1 A yak

2 A sheep

3 A camel



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Sheep

Merino sheep yield an abundance of very fine, white wool that's used to make lightweight knitted fabrics.

2 A merino is a sheep.

Photo © Jean Valentin / Explorer

Today, most of the world's sheep are descendants of the first Spanish merino flocks.

Merinos are believed to have been brought to Spain by ancient Romans. In the 8th century, the sheep were prized and were not allowed to be taken out of the country. But some were smuggled out to Germany and other European countries to be bred with other kinds of sheep. In the 1700s, the ban on exporting merinos from Spain was lifted.

Woolly Mammals

Merinos have white faces and legs, and are covered with thick wool from their noses to their toes. Their tails are cut off for cleanliness. Ewes (females) weigh 100-225 pounds (45-105 kg). Garments made of merino wool provide protection for people in cold or hot weather—air stored between the fine fibers furnishes a barrier against cold and/or heat. The spongy wool absorbs humidity well and, because of its water and keratin content, is fireproof. The curly, flexible wool is also used to absorb odor from lubricating oil around heavy machinery and muffle noise around stereos.

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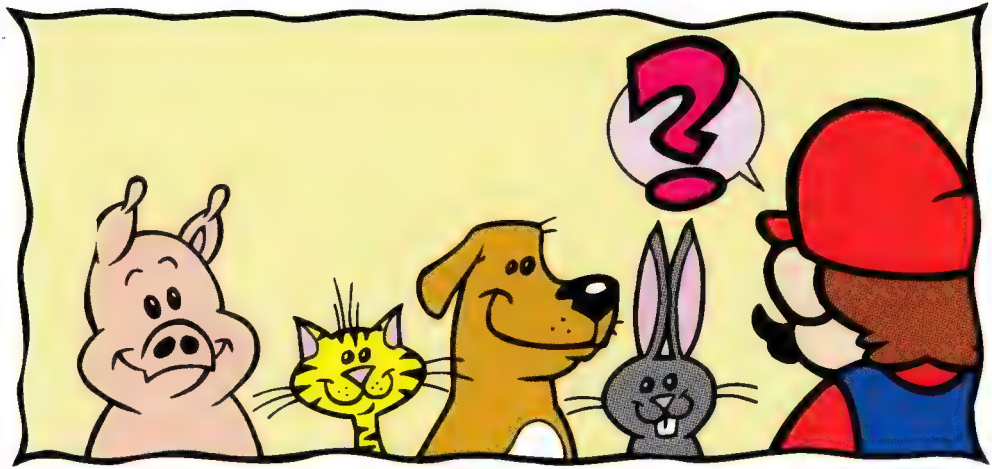
Which of these is a kind of dog?

DOMESTIC ANIMALS

1. Tabby
2. Saint Bernard
3. Schooner



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Dogs

The American Kennel Club (AKC) recognizes about 200 breeds including the collie, Saint Bernard, Chihuahua, and mastiff.

2 A Saint Bernard is a kind of dog.

Photo © M. Claye, Jacana

The Saint Bernard ranks as the heaviest dog, weighing as much as 200 pounds (90 kg).

Experts say that dogs developed from small wolves and were the first animals to be domesticated. A relationship between humans and dogs was recorded 12,000 years ago. After taming the four-legged creatures, people began to breed them for certain physical features or abilities. Some dogs excel at hunting, spotting prey and retrieving it. Others are skilled at sheep-herding or other tasks.

Canine Categories

The AKC classifies dogs in seven groups: sporting dogs like pointers, setters, retrievers, and spaniels; hounds like the greyhound, dachshund, beagle, and Afghan; working dogs like the Saint Bernard, mastiff, and Alaskan malamute; herding dogs like the collie, German shepherd, and Old English sheepdog; terriers like the Skye, Scottie, and miniature schnauzer; toy dogs like the pug, Pekinese, and Chihuahua; and nonsporting dogs, like the poodle, Dalmatian, and bulldog.

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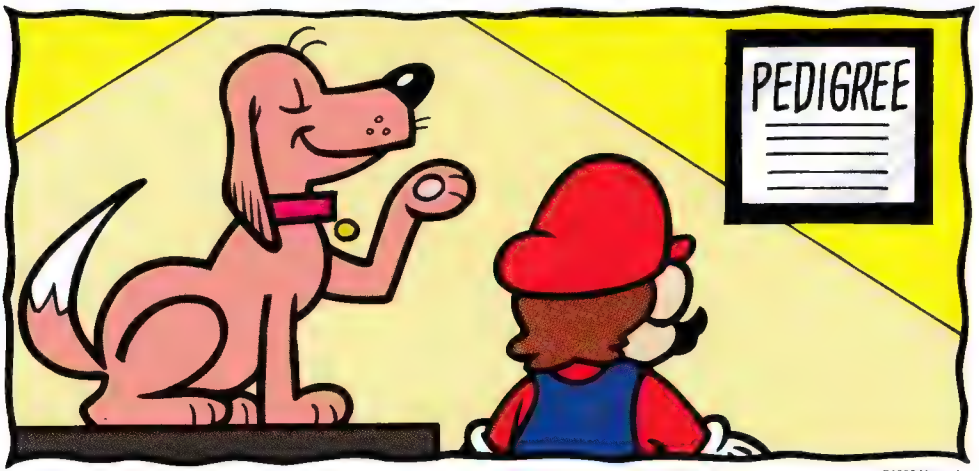
D3 054 11-04

What is a pedigree?

DOMESTIC ANIMALS

1. A foot massage
2. A tornado-like wind storm
3. A record of ancestors of an animal or plant



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Pedigree

A dog that has three generations of ancestors is given a certificate, or pedigree. It lists the history of the animal's family, or its family tree.

3 A pedigree is a record of the ancestors of an animal or plant.

Photo © Frédéric / Jacana

A dog's pedigree lets its owner trace its bloodlines back through several generations. This fox terrier's "grandpa" might have been a champion showdog.

In the world of dog breeding, pedigrees are important. In the U.S., the American Kennel Club records the pedigrees. Breeders can check the background of each of a potential breeding pair of dogs in order to help predict what their offspring would look like.

Family History

Most of the dog breeds we see today didn't exist at one time. They are the result of breeding, or matching up a male and female to pass on certain qualities to their young. Some desirable traits might be a dog's size, strength, hair color, hair texture, tracking ability, endurance, temperament, herding ability, or friendliness. By careful selective breeding, a breeder can increase the chances that the preferred traits will be passed on to the offspring. For example, the smooth-haired bull-terrier is the result of breeding a bulldog with a fox terrier.

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D3 054 12-05

How long have llamas been domesticated?

DOMESTIC ANIMALS

1. Since 3,800 B.C.
2. Since 2,000 B.C.
3. Since 500 B.C.

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Llamas

Since ancient times, Indians in South America's Andes Mountains have raised llamas. Originally the animals were raised only for their meat, milk, and wool. Later, llamas were also used to transport goods.

1 Llamas have been domesticated since 3,800 B.C.

Photo © P. Cheuvat / Explorer

In Peru, llamas are raised in herds for their soft fleecy wool, their milk, their meat, and for their agility as mountain pack animals.

Although the llama is trainable, this relative of the camel shares its cousin's fickle disposition. The humpless llama is often sweet-natured, but it can be very stubborn and moody. If it's unhappy, a llama lays back its ears and spits out an ugly mixture of saliva and food.

Beast of Burden

A llama stands about 4 feet (1.2 m) tall at the shoulder. Male llamas, used as pack animals, march in single file behind a leader. They travel up and down difficult mountain slopes where horses and mules can't go. Llamas thrive in mountain altitudes of 7,500-13,000 feet (2,286-3,962 m), but they don't do well in the heat and humidity of the valleys. As they march over the Andes, each llama can carry up to 200 pounds (90 kg) and walk 15-20 miles (24-32 km) a day hauling a full load!

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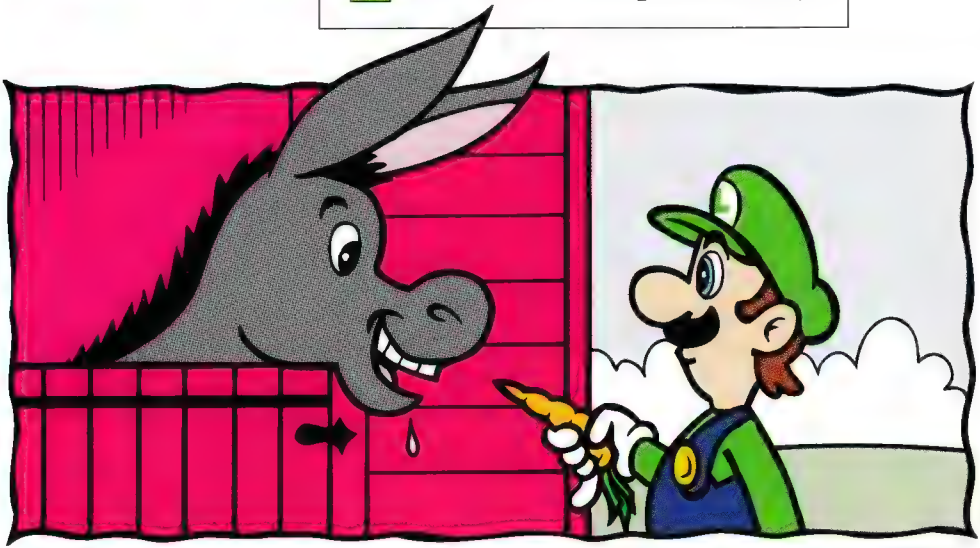
D3 054 12-09

What kind of animal is a mule?

DOMESTIC ANIMALS

1. A horse
2. A donkey
3. Part horse and part donkey



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Mules

A mule is a cross-breed or hybrid mammal. It's the offspring of a male donkey and a female horse.

3 A mule is part horse and part donkey.

Photo © G. Thouvenin / Jacana

Mules can carry heavy loads and are useful in a village like this, that has steep hills.

Are mules more donkey or horse? It's hard to say. They have the shape, size, and coat of a horse. But their heads are larger than the horse's and they have long ears and small hooves like those of a donkey.

Strong and Tough

Mules are used extensively in mountain regions as pack animals because of their sense of balance. They're sure-footed on both flat land and steep, rocky mountain paths. Mules share an important place in the history of the American West. The animals were used for all kinds of work. For example, mules pulled plows for farmers and provided transportation for miners seeking gold in the rocky hills. They pulled water pumps and mine wagons. They hauled heavy stones at mills where grain was ground. And as they were led along muddy riverbanks, mules towed boats and barges on the rivers.

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D3 054 12-13

What is carding?

DOMESTIC ANIMALS

1. Collecting credit cards
2. Combing wool
3. Demanding payment

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Wool

The wool from sheep must go through a series of changes before it can be made into fabric. Carding is a method of processing that wool.

2 Carding is a method of combing and processing sheep wool.

Photo © Ph. Roy / Explorer

A worker in China uses a carding machine to process the wool from sheep.

Sheep's wool is about 50 percent tallow—a gluey substance secreted by the animal's skin—grease, dust, and thorns. Scraping the wool off the hide eliminates the tallow, but there are still clumps of greasy dust and thorns. Several clean-up operations remove some of this debris before the wool is carded.

The Comb-Out

By carding the wool, the good fibers can be extracted like fine locks of hair while tangles and gnarls are removed. Long ago this process was done using dry thistles as combs, but today, machines do the work. The devices are equipped with spinning cylinders that have tilted, thin metal points, somewhat like the cylinder inside a music box. As the cylinder turns, the metal "teeth" comb the wool. The wool is used to fill cushions and mattresses, or stretched and spun into long strings that are wound into balls or onto spools. Then, weavers knit or weave the wool into all kinds of fabulous fabrics.

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D3 054 12-15

When do cats retract their claws?

DOMESTIC ANIMALS

1 When they fight

2 When they sleep

3 When they climb trees

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Cat Claws

Cats extend or retract their claws, depending on their mood. At rest, claws are usually retracted, unless the cat is having a really bad dream!

2 **Cats usually retract or pull in their claws when they sleep.**

Photo © G. Felix / Jacana

It's characteristic of a cat to stretch out its paws with claws extended as if to say, "Make one false move and you're going to get scratched!"

Cats sharpen and trim their claws by scratching them on a scratching post, a tree trunk, or sometimes the living room furniture. This keeps the claws in shape for climbing trees, protection in a fight, or hunting small prey like mice or birds.

Feline Facts

A cat's claws are part of its skin, not its skeleton. Each back paw has four toes: each front paw has five, including a thumb-like toe called a dewclaw. Each toe ends in a sharp, hooked claw that is usually held in a fold of skin by elastic ligaments. When needed, muscles pull the tendons attached to the claws and they extend.

Padded Paws

Cats move silently, thanks to spongy pads on the bottom of each paw. The pads are protected by thick skin and a layer of fat that act like shock absorbers.

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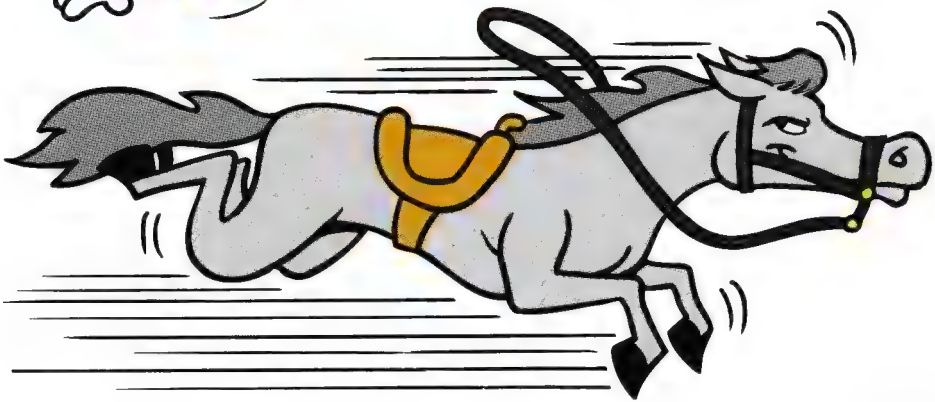
D3 054 14-20

Who domesticated or tamed the horse?

DOMESTIC ANIMALS

1. Prehistoric humans
2. Early Egyptians
3. The Spanish



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Horses

Prehistoric people in central Asia domesticated the horse. It wasn't the first animal to be trained. More than 3,000 years earlier, the sheep, goat, pig, cow, and dog had been domesticated.

1 **The horse was domesticated by prehistoric humans in about 3500 B.C.**

Photo © D. Dorval / Explorer

This Greek carving shows how people harnessed horses for pulling vehicles like chariots in ancient times.

Originally, primitive people hunted horses and ate their meat. Having no weapons, the Stone Age people drove the horses over the edges of cliffs to their deaths.

For Fighting

The Hittites trained horses for war in about 1400 B.C. Early Greek and Roman soldiers rode horses into battle. And during the Middle Ages, knights and nobles relied on their trusty steeds during a fight.

For Work and Sport

Assyrians hunting lions in 800 B.C. rode two-wheeled chariots drawn by two horses. Later, Greeks and Romans used horse-drawn chariots for races that challenged the strength of the animals and the skill of the drivers. And in the United States, the West might never have been developed without the horse-drawn stagecoaches, wagons, and plows.

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Which was the ancestor of the ox?

DOMESTIC ANIMALS

1. The urus
2. The bison
3. The okapi

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Oxen

The urus, a type of ancient wild cattle, is believed to be the ancestor of the present-day domestic or tame ox. The last urus died on a game preserve in Poland in 1627.

1 The urus was the ancestor of the ox.

Photo © P. Paillard / Explorer

Connected by a yoke, the oxen pull together, providing the power to plow a field or haul a wagon.

An ox is the male of a domestic cattle species whose reproductive organs have been removed to make him more mild-mannered and easier to handle.

Hard Workers

At one time, the ox was a common sight. Farmers called upon the ox's exceptional strength to pull the plows that prepared the ground for new crops each year. Oxen were also used to pull carts and heavy wagons. Today, tractors have replaced oxen in most places. But in some poorer nations, where machinery is scarce or unknown, oxen still pull heavy loads and plow the fields.

Today, all kinds of cattle, including oxen, are raised for their skins and their meat. Ox-tail soup remains a popular dish in the U.S. and Europe.

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D3 054 16-08

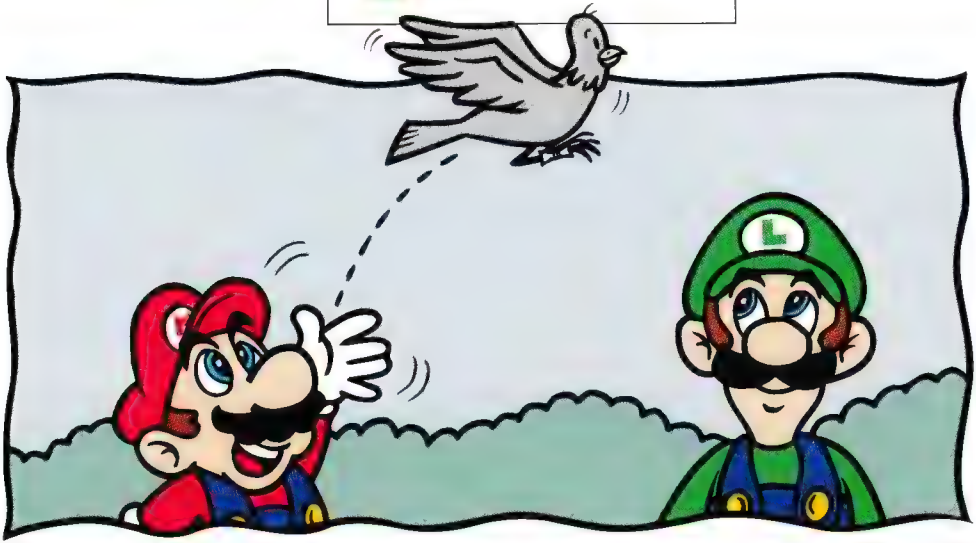
Which bird can be trained to carry messages?

DOMESTIC ANIMALS

1 A pigeon

2 A falcon

3 A Canadian goose



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Pigeons

More than 3,000 years ago, Egyptians trained pigeons to carry messages home. Because of great visual memory and a curious internal compass in their brains, the pigeons always flew home to their roosts.

1 The pigeon can be trained to carry messages.

© G. Perret / Explorer

Trainers know a homing pigeon will deliver in any weather.

Homing pigeons are trained by first releasing them 5-10 miles (8-16 km) from home, then increasing the distance little by little. Some pigeons have flown more than 1,000 miles (1,600 km) in two days—some have flown 600 miles (970 km) in one day, without stopping for food or water.

Flying Mail-Carriers

In ancient times, sailors released pigeons to carry news of their arrival ahead to the harbor. Pigeons also delivered "sports news" about the ancient Olympic Games. And since the Middle Ages, pigeons have carried secret military messages. In 20th-century Germany, hawks were trained to catch the pigeons. But the pigeons are tough. During the Korean War, a pigeon carried a message 24 miles (39 km) in 25 minutes, arriving with one leg shot off and a bullet in the chest.

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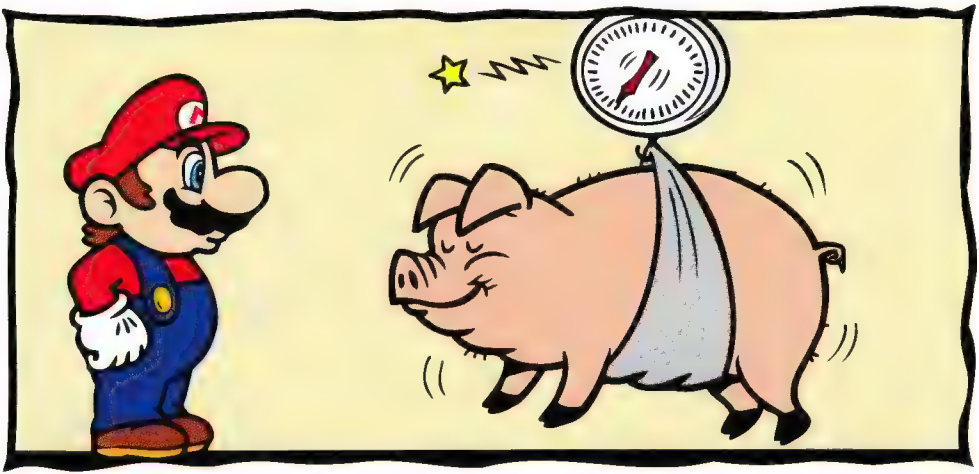
How much does a pig raised for its meat weigh?

DOMESTIC ANIMALS

1. 110-150 pounds (50-68 kg)
2. 210-250 pounds (95-115 kg)
3. 310-350 pounds (140-158 kg)



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Pigs

Some pigs are raised for fat, or lard. Others are raised for their meat—bacon, ham, and pork. Some of these pigs are sold at auctions, where bidding is by the pound. The average pig weighs between 210-250 pounds.

2 Pigs raised for their meat weigh between 210-250 pounds.

© M. Garnier / Explorer

In full confinement, pigs can't move around much but their spaces are kept very clean. And protein-rich food is automatically distributed to each pen so the pigs get plenty to eat.

Once pigs ran free in large barnyards. But today, pig farming is specialized. Piglets are weaned from their mothers after 2-3 weeks and placed in nurseries, where they eat protein-rich food until they're three months old. Then they go to finishing or fattening farms, where they live in groups of 8-14.

Pig Farms

On some farms pigs are put in feed lots where they can roam about inside pig pens. In full-confinement, pigs are kept indoors in small spaces. Since the pigs can't move around very much, they fatten up faster. No matter which type of farm they're raised on, the pigs are sold when they're 6-7 months old and weigh 210-250 pounds (95-115 kg).

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Which word means "the raising of bees"?

DOMESTIC ANIMALS

1. Apennine
2. Epicurean
3. Apiculture

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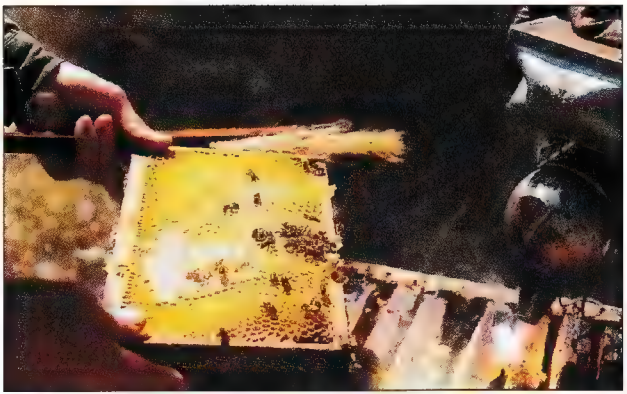
Apiculture

Humans and honeybees have interacted since the Stone Age, when humans first stole honey from hives. Prehistoric people became the first apiculturists when they made crude hives in hollow logs and raised bees for honey.

3 The business of raising bees in called apiculture.



© P Moulu / Sunset

Beekeepers move slowly and protect their faces with veils when handling bees. No quick movements, or a bee might sting!

European beekeepers made skeps, hives like upside-down baskets, which colonists brought to Virginia in 1622. By the end of the 1700s, honeybees were all over the eastern U.S. and settlers took some westward. The modern artificial hive was invented in the 1800s.

Hive Action

Hives have removable supers—file-like sections in which bees build honeycombs. Supers hold 10 combs, each with 8,000 cavities. The bees collect about 15 pounds (6.8 kg) of nectar a day.

Buzzing Business

U.S. beekeepers tend 4.5 million hives, yielding 200 million pounds (90 million kg) of honey per year and 4 million pounds (1.8 million kg) of beeswax, used in candles, polishes, and waterproofing products. Beekeepers may also rent their bees to help farmers pollinate plants.

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Who first domesticated the cat?

DOMESTIC ANIMALS

1. The Egyptians
2. The Romans
3. The Greeks

Illustration: Gary Fields

©1995 Nintendo

Pet Cats

It's believed the modern cat is the descendent of an African wildcat domesticated by Egyptians around 3500 B.C. The domestic wildcats protected Egyptian farms and grain storehouses from rats and snakes. And before long, the felines moved into Egyptians' homes as pampered pets.

1 The cat was domesticated by Egyptians in about 3500 B.C.

© G. Lacz / Sunset

Because of their quiet movements and strange, piercing eyes, cats have always been thought to be mysterious animals.

By 1500 B.C., cats were considered sacred by the Egyptians, who worshiped a goddess that had the head of a cat and the body of a woman. When pet cats died, Egyptians mummified them and mourned by shaving off their own eyebrows. Archaeologists discovered an ancient cemetery that contained more than 300,000 cat mummies.

Cats Everywhere

The Greeks brought cats to Europe around 100 B.C. From there, cats were taken to lands across the globe. At times, they have been considered symbols of evil and witchcraft, but they have always regained their popularity. Today there are about 58 million pet cats in the U.S. alone!

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Where do dromedaries live?

DOMESTIC ANIMALS

1. In deserts of North Africa and Asia
2. In the Indian Ocean
3. In the Amazon rainforest

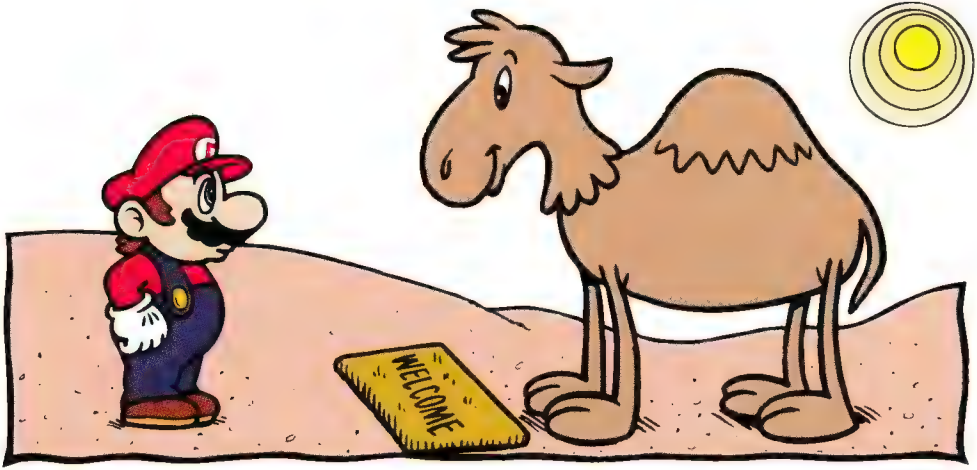


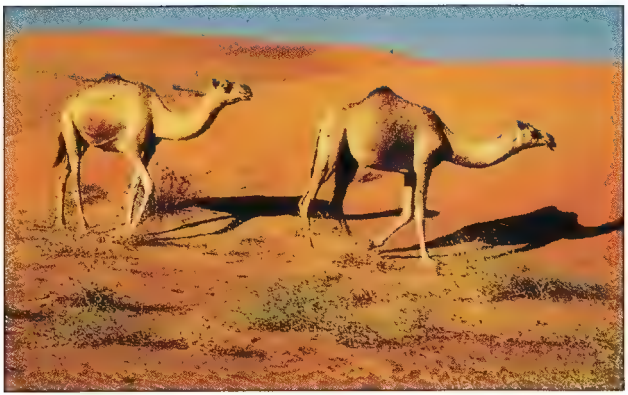
Illustration Gary Fields

©1995 Nintendo

Dromedary Habitat

Dromedaries like the dry desert climate. They can't survive in humid regions.

1 Dromedaries are one-humped camels that live in deserts of North Africa and Asia.



© Animals Animals / Sunset

Herds of wild dromedaries, descendants of domestic camels, roam the deserts of Australia.

In North Africa, the Arabian peninsula and western Asia, domesticated dromedaries, also known as Arabian camels, are used for transportation and as pack animals—carrying heavy loads across vast expanses of desert. Their long eyelashes protect their eyes from sand and dust, and their wide feet help them travel across soft, sandy ground.

Temporary Relocation

Because of their strength and stamina, dromedaries appealed to traders and explorers all over the world. But attempts to transplant them to Brazil, Bolivia, Cuba, Spain and the U.S. failed. The only place they survived was Australia, where they were used on expeditions to explore the desert. To feed them, the explorers mashed up eucalyptus and acacia leaves. After the expeditions, the dromedaries were left in the wild. Herds of wild dromedaries still live in Australia today.

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Which is the smallest breed of dog?

DOMESTIC ANIMALS

1. The poodle
2. The pug
3. The chihuahua

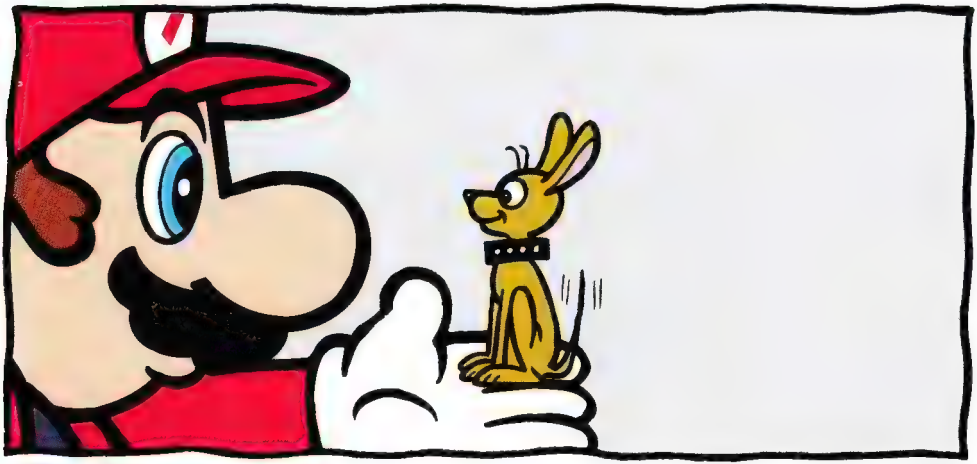

Illustration: Gary Fields

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Chihuahuas

Chihuahuas were named for the city in Mexico where they originated.

3 The chihuahua is the smallest breed of dog.

© G. Lacz / Sunset

Chihuahuas, like this Long Coat, are loyal, affectionate and lively.

They measure 6½ to 8 inches (16-20 cm) long and weigh 4½ to 9 pounds (2-4 kg)—featherweights compared to big dogs such as the Irish wolfhound which can weigh as much as 190 pounds (86 kg). In spite of their size, chihuahuas are lively, bold, and smart. Most have pointed muzzles, small, delicate paws, and short, fine fur. Long Coat chihuahuas have fluffy ears, thick tails, and long fur. Though they make loyal pets, purebred, or pedigreed chihuahuas are raised as show dogs and judged on their physical characteristics and temperament.

Sacred Dog

The Aztecs, ancient people of Mexico, considered chihuahuas sacred and bred hundreds of them. The dogs are represented in central American art dating from the 9th century, and their skeletal remains have been found, buried alongside their owners, in ancient Aztec tombs.

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Which are the fastest dogs?

DOMESTIC ANIMALS

1. Greyhounds
2. Bloodhounds
3. Wolfhounds

Illustration: Gary Fields

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Greyhounds

Long and lean greyhounds are built for speed. They can run at speeds of up to 35 miles (56 km) per hour.

1 Greyhounds are the fastest dogs.

© G. Lacz / Stuttset

Fleet-footed greyhounds are used in dog races in the U.S.

The greyhound is easy to recognize. Its body is sleek and muscular with long legs, rounded paws and a long head. Adult greyhounds generally measure 26 to 30 inches (66-76 cm) tall at the shoulders and weigh 55 to 75 pounds (25-34 kg).

Racing Dogs

Several states have dog tracks where greyhound races are held. As at horse races, the dogs race around a track and onlookers bet on the outcome. Naturally the dogs don't carry jockeys, so a mechanical lure is used to spur the dogs on. The dogs chase the lure the same way they'd chase a rabbit through a field.

Greyhound History

The greyhound breed can be traced to ancient Egypt. Greyhounds are pictured in Egyptian art from 4000 B.C. Perhaps because of their noble bearing, for centuries greyhounds were the dogs of the aristocracy. Early English law stated that commoners could not own them. The dogs were brought to the U.S. from Europe in the 19th century and were used to chase rabbits and other creatures away from farms.

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Which dogs are used in sheep-herding?

DOMESTIC ANIMALS

1. Terriers, Bulldogs, and Boxers
2. Pointers, retrievers, and setters
3. Collies, Corgis, and Bouvier des Flandres

Illustration: Gary Fields

©1995 Nintendo

Herding Dogs

Dogs have helped farmers herd sheep since the 1570s. Many of the dogs we keep as pets today were originally bred for their skills in herding sheep.

3 **Collies, Corgis and Bouvier des Flandres are three breeds of dog used for herding sheep.**

© J. M. Fichaux / Sunset

Herding dogs are trained to respond to cues from their masters. A short whistle or a wave of the hand sends the dog off to work.

There are more than ten different breeds of dogs that are used to herd sheep. Herding dogs, also called working dogs, are smart and easy to train. They're known to be loyal to their owners and to respond quickly to commands. Some, like the Old English Sheepdog, are large. Welsh corgis and Australian shepherds are small to medium-sized. But all herding dogs are quick and agile—able to steer a flock and chase down strays.

With the Flock

On farms, sheep graze in open grassy fields. They travel in large flocks. Herding dogs keep the flock together and prevent it from wandering into treacherous areas. They round up the sheep much the same way cowboys on horseback herd cattle. If the flock wanders in the wrong direction, the dog barks and nips at the sheep to make them change direction. If a sheep strays from the flock, the dog chases it down and leads it back to the group.

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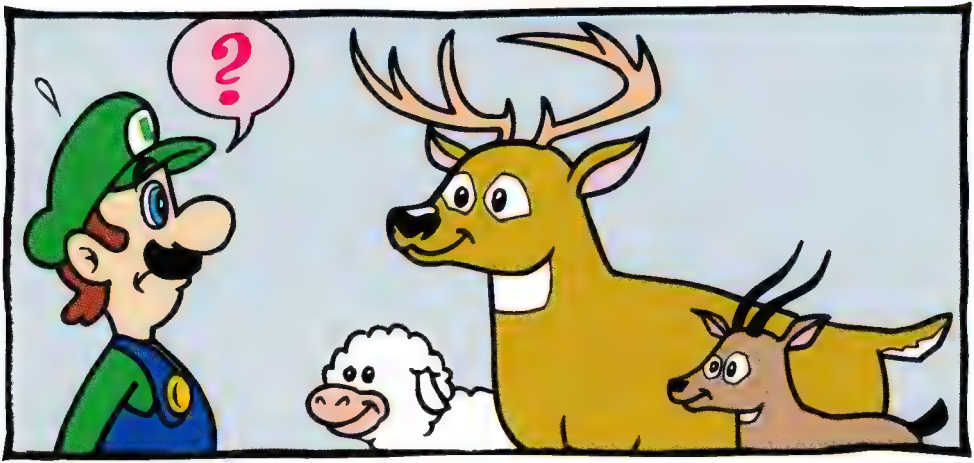
Which does not have horns?

DOMESTIC ANIMALS

1. Deer
2. Antelope
3. Sheep



Illustration, Gary Fields

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Horns and Antlers

Many mammal species such as antelope, sheep, cattle, and goats have bony structures called horns on their heads. Deer don't have horns, but hornlike, branched forms called antlers.

1 Deer do not have horns, they have antlers.

© G. Lacz / Sunset

The auroch or urus, a horned mammal, is the ancestor of all cattle.

Horns are bones extending from an animal's skull. They're covered with skin containing a lot of keratin, a protein that's also in human nails. Keratin makes the horns very firm and durable—a horned animal keeps its horns for life. In some species, both the male and female grow horns.

About Antlers

Antlers also grow from an animal's skull, but they're covered with a velvety skin that doesn't become hard. Instead, it dies and peels off as the animal rubs the antlers against tree trunks and bushes. Then a new skin covering grows in its place. Only males have antlers, and those are shed every year.

Both Useful

Horns and antlers are used as self-defense weapons against an enemy. And males often use them when fighting to establish which is the leader of the herd.

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Which is not a type of cow?

DOMESTIC ANIMALS

1. Holstein
2. Guernsey
3. Delaware

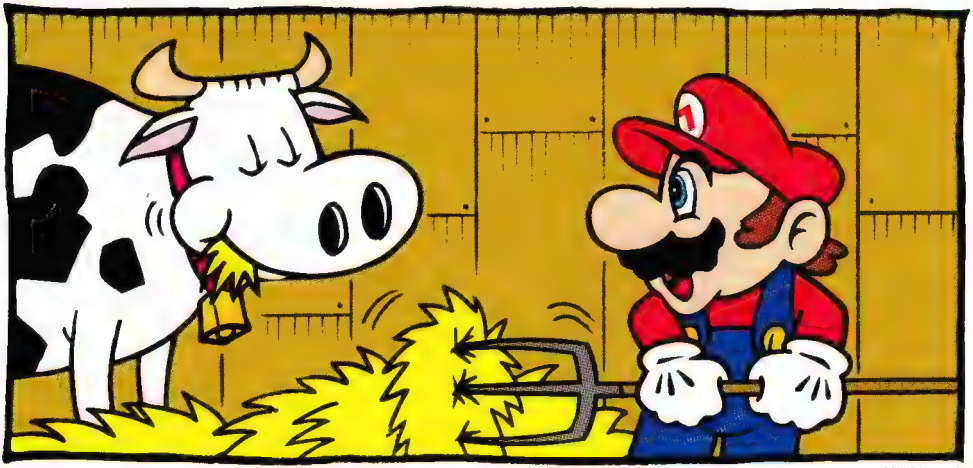

Illustration Gary Fields

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Cows

In the U.S. five dairy breeds are considered the best milk producers: Holstein, Jersey, Guernsey, Ayrshire, and Brown Swiss.

3 **Delaware is not a type of cow.**

© G. Latz / Sunset

Cows graze to get the nutrients they need to produce milk.

In colonial America, cows brought from Europe produced very little milk. Over the years, dairy farmers improved their cows' diets and selectively bred their herds to increase milk productivity.

Better Breeds

First brought to the U. S. in 1795, black and white Holsteins produce the most milk with the least butterfat—used to make butter. There are more Holsteins in the U.S. than any other breed. Gray or tan Jerseys give the least milk, but it contains the most butterfat. Guernseys' orange coats have white markings, often with a white shield on the forehead. This breed ranks second in butterfat content.

Ayrshire cows are red and white. They're more rugged than other breeds and thrive in hilly country. Second in milk output, the Brown Swiss give milk rich in nonfat solids—proteins, minerals, and milk sugars or lactose useful for making cheese.

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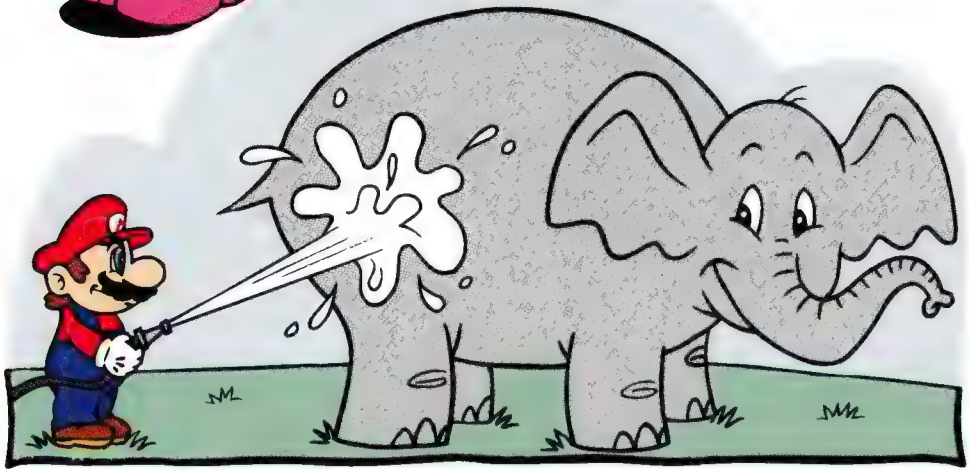
Which is an elephant trainer?

DOMESTIC ANIMALS

1. A curator
2. An effendi
3. A mahout



Illustration, Gary Fields

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Mahout

In Asia, elephants have been domesticated for centuries and used as transportation, for war, and in parades. Each animal has its own trainer, or mahout, who is more like its friend.

3 A mahout is an Asian elephant trainer.

© C Pavard Hoa Qui

Until the elephants are about 15 or 16 years old, they are watched over, bathed, and fed by their mahouts.

Elephants are intelligent animals. And in some Asian countries, elephants receive more education than some people.

School for Elephants

Elephant training begins with the presentation of a young elephant to its mahout, a boy especially chosen for the job. The elephant and its mahout will spend 10-12 years together. During this time the elephant learns to trust its trainer. At first the mahout teaches the elephant verbal commands. When the elephant is between 15-20 years old, the mahout climbs on its back and trains it to obey voiceless signals for "stand," "turn around," "go forward," and so on, by gently kicking it behind the ears. An elephant that's been well trained also remembers about 30 verbal commands the mahout has taught over the years.

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Which is the strongest domesticated animal?

DOMESTIC ANIMALS

1. Hippopotamus
2. Elephant
3. Rhinoceros

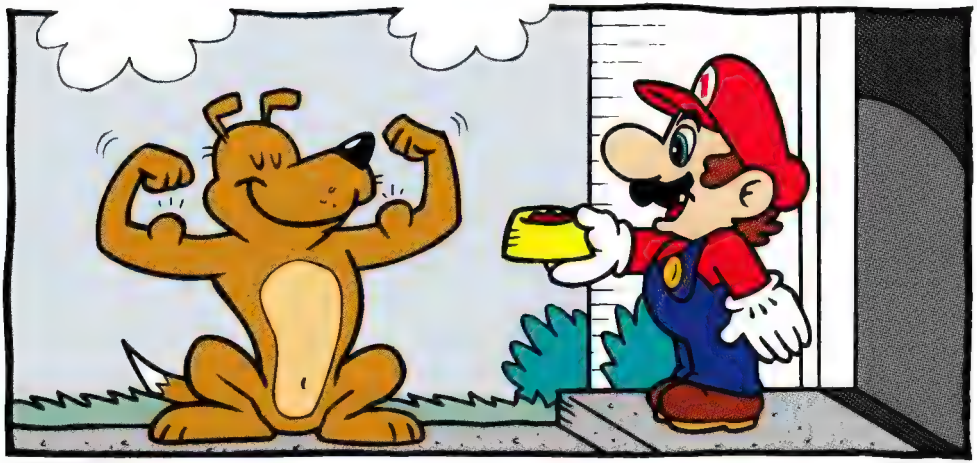

Illustration: Gary Fields

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Elephant Strength

The elephant is the largest land animal, the only animal whose nose, or trunk, is used as a hand, and the strongest domesticated animal. It can carry up to 600 pounds (272 kg) on its back and logs weighing 2 tons (1.8 metric tons) with its trunk.

2 The elephant is the strongest domesticated animal.

© M. Renaudeau / Hoa Qui

Mahouts direct the elephants to move the logs to a particular position, and the elephants comply.

Elephants have worked with humans for thousands of years. In 331 B.C., Persian soldiers rode elephants into battle. And in India, elephants still work for loggers.

Living Bulldozers

With their mahouts, or trainers, mounted on their backs, the elephants follow verbal and nonverbal commands. Trainers may ask the animals to knock down trees, carry them to a specific spot and place them in piles, or load them onto trucks. Elephants knock down trees by pushing with their heavy foreheads. Using their trunks, they can lift huge trees like toothpicks. Only Asian elephants can be trained for this kind of work; African elephants are more temperamental and difficult to train.

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Which is a term used to describe the color of a horse's coat?

DOMESTIC ANIMALS

1 Hay
2 Bay
3 Day

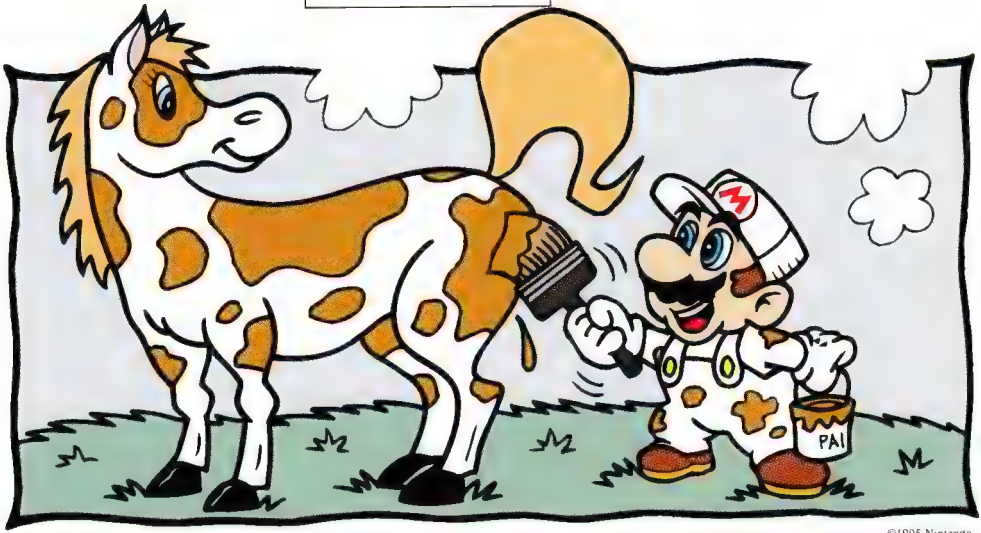

Illustration Gary Fields

©1995 Nintendo

Horse's Coat

A horse's coat is made of short thick hairs on its body, long thick hairs on its mane, and long coarse hairs on its tail.

2 **A bay horse usually has a reddish coat and black mane and tail.**

© G. Lacz / Sunset

Frequent brushing is essential to the health of a horse's coat.

The color varieties of a horse's coat are infinite. They can range from albino white, with no pigmentation, to true black with no hint of a white hair anywhere. Between the two extremes there are many color and pattern possibilities.

Colorful horses

Among the most popular types of horse coats are bay, chestnut, roan, black, and white. Bay can be any shade of brown from red brown to sandy brown. Bay horses usually have black manes, tails, and stockings. Chestnut horses are like bays minus the black coloring. A roan horse is one that has white mixed with other colors. A blue roan is black mixed with white and a strawberry roan is chestnut mixed with white. A pinto has mostly white spots with other color spots as well. Most appaloosas have white on their hind legs and rear ends with darker spots elsewhere. Gray horses are born dark but grow white hairs as they get older. In fact, some will end up almost all white.

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What is a bridle?

DOMESTIC ANIMALS

1. A party before a wedding
2. A lace collar
3. Headgear used to control a horse

Illustration: Gary Fields

©1995 Nintendo

Bridle

A bridle has three main parts: a bit, a headstall, and reins.

3 **A bridle is headgear used to control a horse.**

© G. Lacz / Sunset

The bridle helps the rider train his horse.

The bit is usually a metal bar placed horizontally in a horse's mouth. It is controlled by the reins which are attached to leather straps, called the headstall, on the horse's head. A headstall consists of several parts including a crownpiece, brow-band, cheek straps and a throat-latch.

The reins are held by the rider or the driver if the horse is pulling a carriage. When the reins are pulled, the bit pulls back on the horse's mouth and causes him to stop or slow down. To make the horse turn, the driver pulls the reins to the left or to the right. Bridle styles vary widely. A horse's training and temperment and the sensitivity of its mouth, as well as the personal preference of the rider or driver are factors in the selection of a bridle.

Blinders

Sometimes headstalls also have blinders on them. Blinders are round leather pieces attached to the leather straps near the horse's eyes. They keep the horse looking straight ahead. This way he can't be frightened by what is happening next to him.

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What are stirrups?

DOMESTIC ANIMALS

1. Fruit drinks
2. Troublemakers
3. Horseback riding equipment

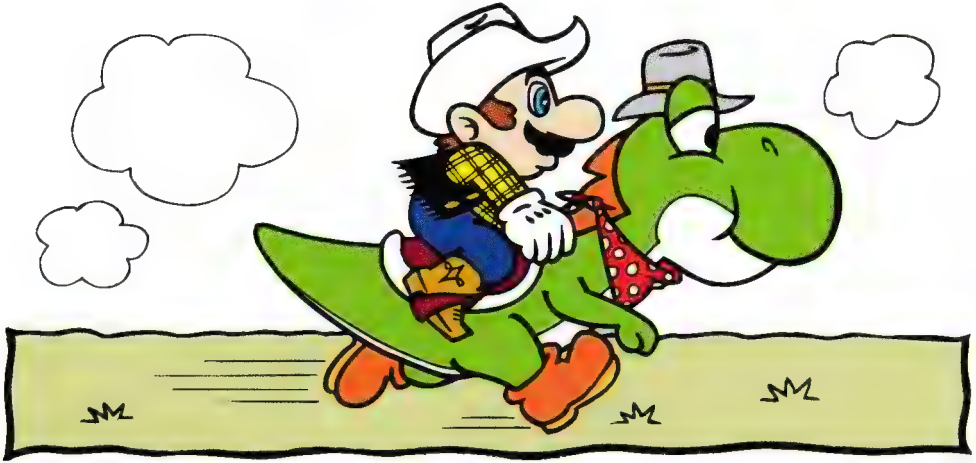

Illustration Gary Fields

©1995 Nintendo

Stirrups

Stirrups are foot supports which hang from the saddle on either side of the horse on which a rider places his or her feet.

3 **Stirrups are the frames hanging from saddles which support the rider's feet.**

© G Lacz / Sunset

Examples of early fancy handmade stirrups.

It is uncertain which people first used stirrups. Some historians believe that they originated in the Asian grasslands as early as the second century B.C.

Stirrups and Warfare

Historians believe that because they were equipped with strong, well-saddled horses, the 7th century Arabs were able to conquer many lands as far away as Spain and even into France.

In the 8th century stirrups were being used by riders in western Europe. The use of stirrups made fighting easier as the soldier was able to stay in his seat more securely. If the rider needed his hands to carry a weapon, stirrups allowed him to control and direct his horse using only his legs. Stirrups also allowed men to stand in their saddles as they charged their enemies with lances or swords.

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Which is a good hunting dog?

DOMESTIC ANIMALS

1. Miniature Doberman
2. Pekinese
3. German short-haired pointer

Illustration: Gary Fields

©1995 Nintendo

Pointers

The ancestors of the pointer are hounds, spaniels, and setters. All three of these dogs are still among the best hunting dogs today.

3 The German short-haired pointer is an excellent hunting dog.

© Len Sirman

Instinctively most dogs know how to track prey but they must be trained to retrieve prey.

Originally, in the 1600s, pointers were used only for pointing. That is to say, they pointed out hares to the hunters who then sent dogs such as greyhounds after the game to track it down. By the mid 1800s hunters figured out that pointers could also be excellent bird dogs.

Sleek Dogs

Pointers have long muzzles, hanging ears, and long tapered tails. Their hair is short and smooth; either white with yellowish or reddish-brown markings or white with black or liver-colored spots. Pointers are 23-25 inches (59-63 cm) tall and weigh from 50 to 60 pounds (23-27 kg). Pointers are graceful, sleek, fast, and smart. They make wonderful faithful pets and can be trained to be terrific Frisbee catchers.

The German short-haired pointer is a popular hunting dog. It can track game as well as point and retrieve it from the water.

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How long can a camel go without drinking?

DOMESTIC ANIMALS

1. 2 days
2. Several weeks
3. 4 years

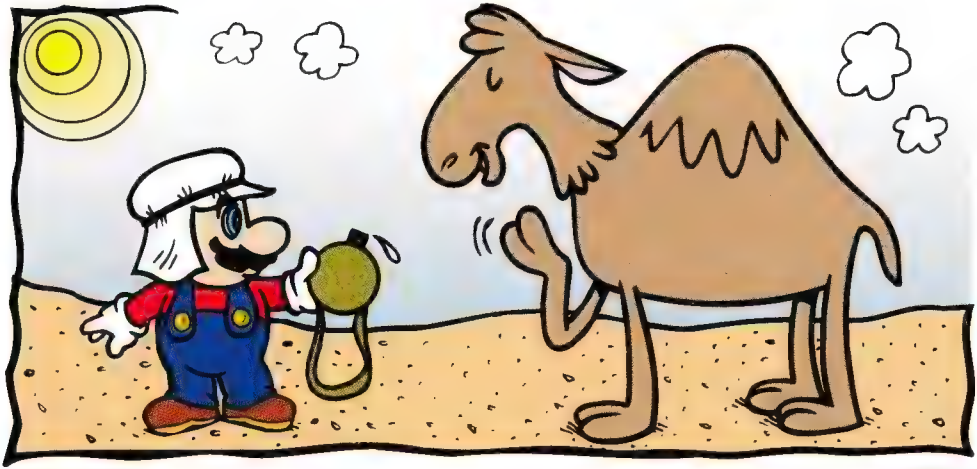

Illustration Gary Fields

©1995 Nintendo

Camels

The importance of the camel in hot dry regions is understandable. No other animal can tolerate dehydration —abnormal loss of water from the body— for as long.

2 A camel can live without water for several weeks.

© G. Lacz / Sunset

Camels can lose up to 25 percent of their body weight from dehydration.

Camels are built to survive desert hardships. They have large two-toed feet which make it easy to walk on sand. Windblown sand can be dangerous for unprotected animals. Camels, however, have a double row of long eyelashes to protect their eyes, hairy ears to keep the sand out, and the ability to close their nostrils. When properly trained camels can be very gentle, but occasionally when angry, they spit in people's faces, bite, and kick. Because they are cud chewing animals—they chew their food, swallow it, then regurgitate it to chew it some more—their spit smells particularly awful.

Water Retention

Camels are able to retain a lot of water. This is why they can go without drinking for so long. They also get water from eating desert plants. When camels do drink, however, they can swallow as much as 25 gallons (95 l) of water in ten minutes.

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What is a dromedary?

DOMESTIC ANIMALS

1. Musical instrument
2. Indian curry dish
3. One-humped camel

Illustration: Gary Fields

©1995 Nintendo

Camel types

There are two species of camel: Dromedaries, also called Arabians, have one hump and live primarily in Africa, although some can be found in the Australian outback. Bactrians have two humps and live in Asia. They are shorter but heavier than Arabian camels.

3 A dromedary is a one-humped camel.

© Philippart Sirius / Sunset

These are meharis, a small fast type of dromedary, ideal for riding.

Originally both species lived in herds in the highlands of central Asia. There are perhaps still a few wild herds of Bactrians in the more remote areas of Asia but for the most part, they are now domesticated pack animals.

Valuable Animals

Dromedaries and Bactrians are very valuable to the desert and mountain people because they provide their primary means of transportation. The animals also provide their owners with food (meat and milk), shelter, and clothing. Camels grow thick wool in the winter time from which warm clothes are woven, and their hides are used to make leather items.

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What is a camel's hump made of?

DOMESTIC ANIMALS

1. Fatty tissue
2. Bone
3. Hair

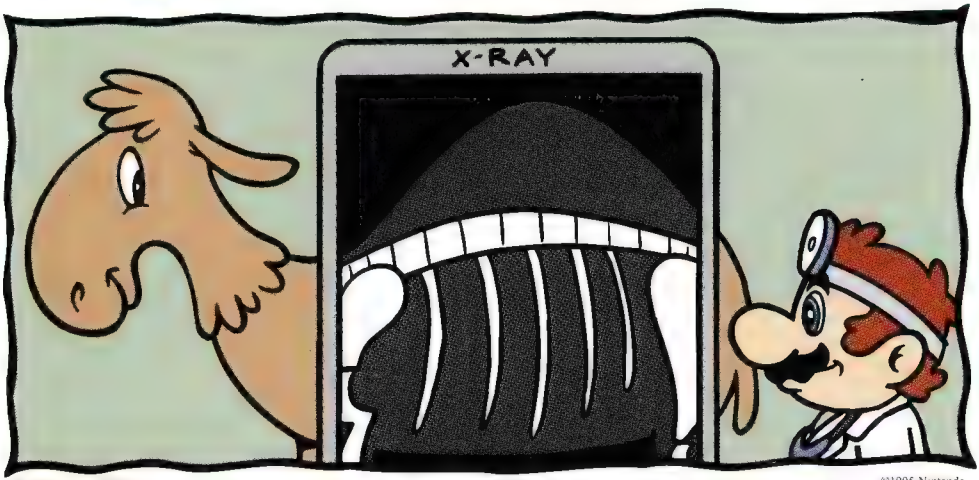

Illustration: Gary Fields

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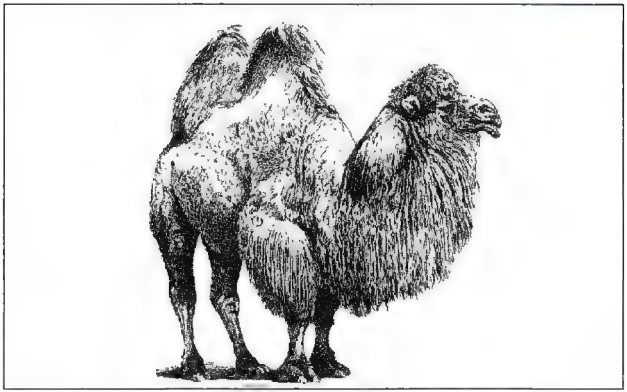
Camel humps

There is no bone structure in a camel's hump. It is made solely of fatty tissue. The hump is like a small storage unit of sustenance for the camel—a reserve tank.

1 A camel's hump is made of fatty tissue.



© D.R

Healthy camel humps sit straight and tall.

Two-humped camels, Bactrians, are used as beasts of burden while dromedaries, with one hump, are used for riding. When camels are healthy their humps sit straight and tall. When camels are not well however, their humps sag, fall over, and almost disappear when all the fat has been used up.

Baby Camels

A Bactrian baby is born 385 days after conception and a dromedary calf is born 315 days after conception. The newborns are born with their eyes wide open, they weigh about 30 pounds (14 kg) and are covered with hair. They can stand on their feet and nurse right away. When baby camels are born, their humps are actually a flap (or two) of skin which doesn't stand up and become solid until it is filled with fatty tissue. It takes camels about five years to reach adulthood and they can live to be 40 years old.

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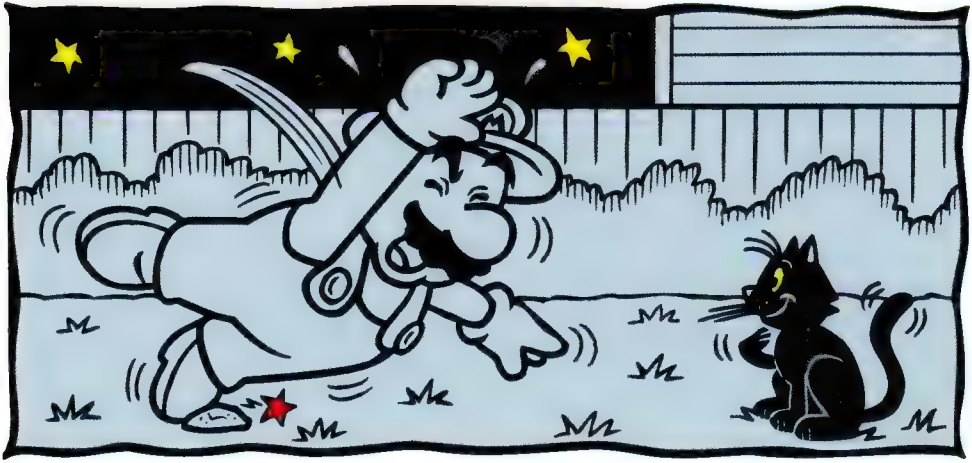
Do cats have better night vision than humans?

DOMESTIC ANIMALS

1 Yes

2 No



Illustration, Gary Fields

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Cat Vision

Behind the retina of a cat's eye is a membrane that works like a mirror to reflect light. This allows a cat to see six times better in the dark than a human.

1 Yes, cats have better night vision than humans.

© G. Lacz / Sunset

Depending on a cat's breed, its eyes can be copper-colored, yellow, green, or dark blue. Some cats even have two different colored eyes.

This membrane, called tapetum lucidum makes the cats' eyes appear shiny in the dark. Cats' eyes have other unusual features as well. The black opening at the center of the cat's eye, called the pupil, is shaped like a slit. In the dark, it widens to a circle to let more light into the eye. The pupil in the human eye functions in a similar way, but it is always round.

Keen Senses

Besides keen eyesight, cats also have a heightened sense of hearing. A cat's ears are on top of its head and each one is capable of moving separately. A cat's sense of smell is also strong. Besides a sensitive nose, a cat has a separate sense organ in its mouth that detects scents. A cat's whiskers, also called "vibrisae" or "tactile hairs," are highly sensitive touch organs. Whiskers transmit signals when they brush against surfaces or sense wind flow, making the cat keenly aware of its surroundings.

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What is equitation?

DOMESTIC ANIMALS

1. A branch of mathematics
2. The art of horseback riding
3. Water ballet

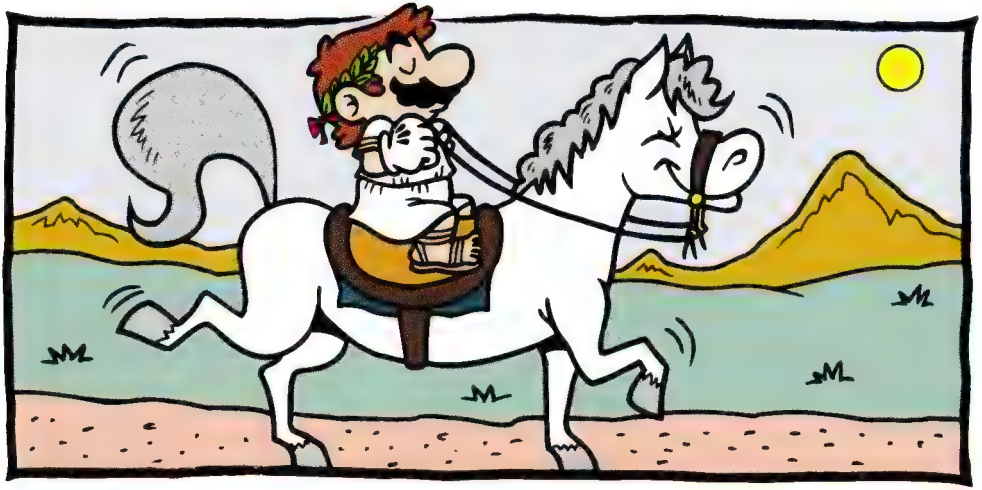

Illustration: Gary Fields

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Equitation

Teaching a horse to respond to the slightest amount of a rider's hand and leg pressure takes a lot of patience and persistence.

2 Equitation is the art of horseback riding.

© G. Lacz / Sunset

Students of the prestigious Cadre Noir Riding school in Saumur, France, demonstrate their skills.

The art of riding on horseback—classical equitation—began to be developed in the 14th century. Hundreds of years earlier, a Greek general named Xenophon (430-355 B.C.) had already described horseback riding as a science and an art. Many modern equitation practices stem from Xenophon's riding methods.

Well-mounted Knights

Knights in medieval times knew that to be effective in battle, they had to have total control over their horses. Medieval riders trained their horses to jump out of harm's way and discourage foot soldiers from approaching. Knights had to learn to control their horses with one hand, to leave the other hand free to brandish a weapon.

The Spanish School of Riding in Vienna, Austria and the Cadre Noir in Saumur, France, are two of the most famous classical riding schools in the world today.

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From which family does the dog descend?

DOMESTIC ANIMALS

1. Canids
2. Orthopids
3. Arachnids

Illustration: Gary Fields

©1995 Nintendo

Canids

The Canid, or canine, family is made up of approximately fourteen existing types of dogs and doglike animals including hyenas, foxes, wolves, and jackals.

1 The dog is a descendant of the Canid family.

© G. Lacz / Sunset

Dogs of widely varied breeds all have descended from the Canids.

Members of the Canid family are found all over the world, except for remote ocean islands and Antarctica. Canids are runners by nature and are most often slender, long-legged animals. Prehistoric dogs were like wolves. These dogs and humans competed for food, often eating each other to survive. Scientists believe canines were the first animals to be domesticated, perhaps as early as the Neolithic period (9000-8000 B.C.). How this occurred remains a mystery.

Prehistoric Watch Dog

Anthropologists think that one of the reasons humans befriended dogs was because of the dogs' skill as guards. Dogs were able to warn against danger or indicate when an outsider was approaching.

It wasn't long before humans began training dogs to guard their sheep and cows as well. Today dogs still help sheep and cattle ranchers protect their herds.

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How long do puppies usually nurse?

DOMESTIC ANIMALS

1. 5 days
2. 10 weeks
3. 9 months

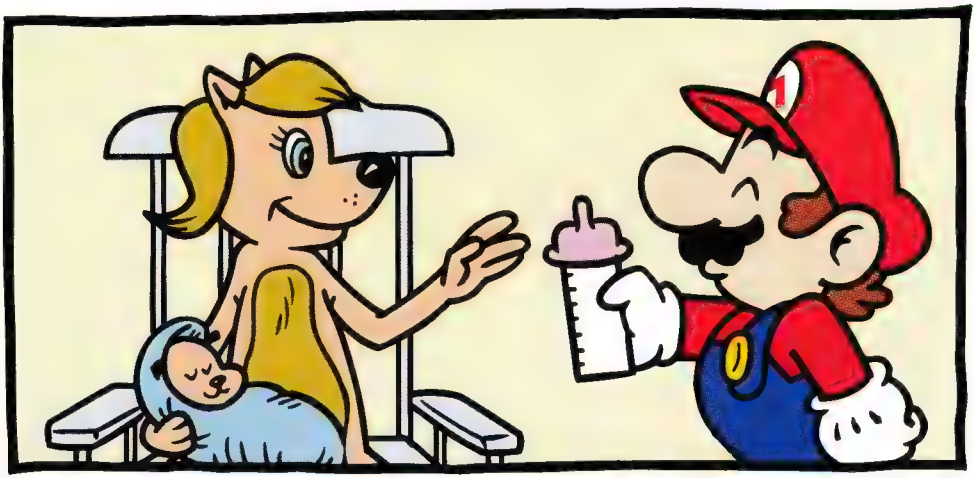

Illustration: Gary Fields

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Puppies

Puppies usually stop nursing by the time they are ten weeks old. When a puppy stops nursing it is said to be weaned.

2 Puppies usually nurse for ten weeks.

© G. Lacz / Sunset

Mother's milk is the best nutrition for puppies during their early life.

Most puppies need twice as much food for their weight as adult dogs. From two to five months old a puppy should be fed four times a day and most meals should consist mainly of cereals. As they get older the number of meals decreases and when adulthood is reached dogs should be eating high-protein meals twice a day. Fresh water should always be available to dogs, no matter what their age. It is important for the puppy's hunger to be satisfied otherwise he or she can try to satisfy it by chewing on furniture, rugs, or whatever else looks edible.

Canine Health Care

Besides a healthy diet, a dog should get plenty of exercise. The bigger the dog, the more space it needs to run. Above all, it is essential that dogs see a veterinarian regularly. The vet gives a dog all the shots necessary to prevent canine diseases, just as your doctor gives you vaccinations against human diseases. The vet will also answer any questions you might have about your puppy's health and care.

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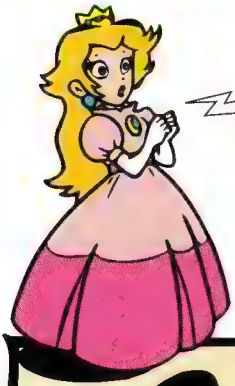
What are Canine Companions?

DOMESTIC ANIMALS



1. People who keep dogs company
2. Dogs trained to help disabled humans
3. Dog toys

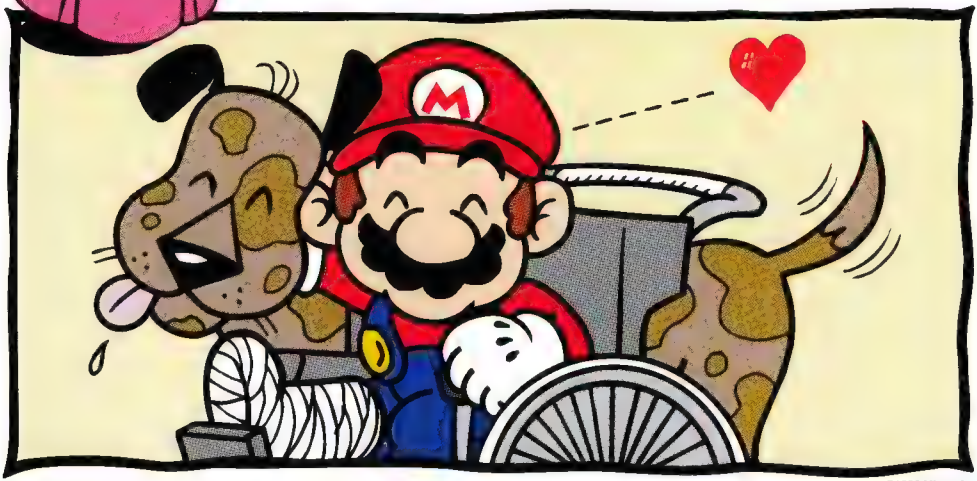


Illustration: Gary Fields

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Canine Companions

Canine Companions for Independence (CCI) is a non-profit organization that provides trained service, hearing, and social dogs to people with disabilities.

2 Canine Companions are dogs trained to help disabled humans.

© G. Lacz / Sunset

Canine Companions are trained at one of four training centers across the United States.

CCI dogs are not Seeing Eye dogs for blind people; they are trained to assist people with other disabilities. Service dogs are trained to carry out tasks their disabled masters are unable to perform, such as turning light switches on and off, pushing elevator buttons, retrieving items, and pulling a wheelchair. Hearing dogs are trained to alert their hearing-impaired masters to crucial sounds such as a ringing telephone, a fire alarm, a smoke alarm, or a baby's cry. Social dogs are trained to care for children with disabilities and people with developmental disabilities, such as victims of Down's Syndrome. Any person with a disability who wishes to increase his or her independence through the use of a dog, or a facility, such as a nursing home, who wants to institute a pet therapy program is eligible to apply for a Canine Companion.

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What is a fox terrier?

DOMESTIC ANIMALS

1. A plant
2. A type of dog
3. A weapon

Illustration: Gary Fields

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Terriers

Terrier means burrow in French. Terrier dogs were originally raised to hunt foxes, badgers, rabbits, and other burrowing animals.

2 A fox terrier is a type of dog.

© G. Lacz / Sunset

Terriers are good hunters, guard dogs, and companions.

The largest of the terriers is the Airedale terrier, measuring 2 feet (60 cm) high at the shoulders, and the smallest is the Yorkshire terrier, standing only 10 inches (26 cm) tall.

Foxy Dogs

The fox terrier is one of the oldest British terrier breeds. The two main varieties of fox terrier—smooth and wire-haired—are completely identical except for their coats. Smooth-haired terriers may have evolved from crosses between wire-haired terriers and other fox-hunting dogs. Wire-haired terriers were the most popular dogs in England after World War I. Their coats are curly, and they have abundant whiskers and leg hair.

Fox terriers have V-shaped hanging ears and erect tails. Males grow up to 15.5 inches (40 cm) tall at the shoulder and weigh 18 pounds (8 kg). Females are a bit smaller and lighter. Fox terriers have primarily white coats, often marked with reddish or brownish spots.

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Are boxers and bulldogs the same type of dog?

DOMESTIC ANIMALS

1 Yes

2 No

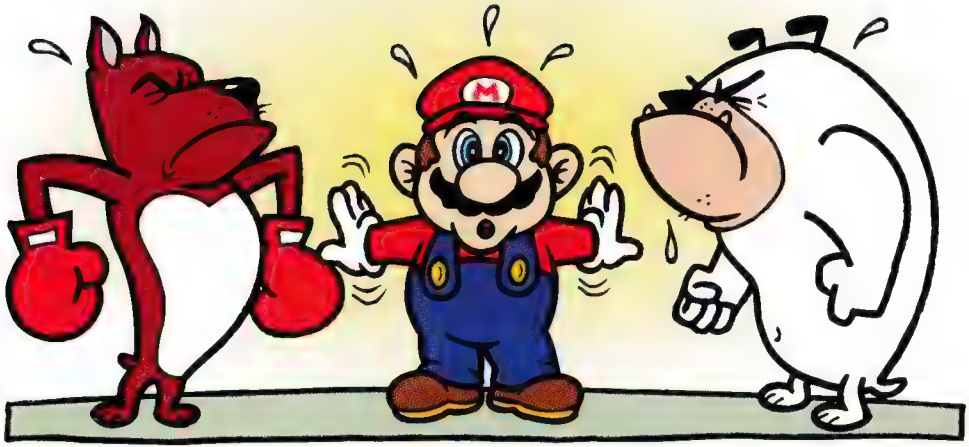

Illustration: Gary Fields

©1995 Nintendo

Dog Breeds

Boxers and bulldogs have a lot in common. They are both small, compact dogs and may have nearly the same coloring. The boxer was developed in Germany and includes bulldog and terrier genes.

2 No, boxers and bulldogs are not the same type of dog.

© G. Lacz / Sunset

Some find it difficult to tell the difference between the French bulldog (above) and the English bulldog or the German boxer.

Although boxers and bulldogs have many of the same characteristics, they are separate breeds. No one is sure how boxers got their name. Bulldogs, on the other hand, were created to bait bulls, or harass them for sport. The bulldog's large head, short neck, and wide chest made it perfectly suited for the sport. And it was in a bulldog's nature to grab a bull by the nose and cling for dear life. When bullbaiting was outlawed in 1835, bulldog breeders began to transform bulldogs from fighters to easygoing, quiet companions. Bulldogs can be grayish, white, pied (spotted), or beige in color. Boxers are muscular dogs with a broad, square muzzle (jaws and nose) and slight underbite. Their coat is grayish, reddish, or pied, and they have a dark mask around their eyes and muzzle. Most boxers are friendly and are quite playful.

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Where does cashmere come from?

DOMESTIC ANIMALS

1. Geese
2. Armadillos
3. Goats

Illustration: Gary Fields

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Cashmere Goats

Cashmere comes from the fine, soft wool or hair of the undercoat of the Kashmir goat.

3 Cashmere comes from goats.

© Sunset

The wool from Kasmir goats is used to make soft, warm cashmere yarn and fabric.

Kashmir goats were traditionally raised in Tibet, China, Iran, Iraq, central Asia, and Outer Mongolia, and especially in the former kingdom of Kashmir, now part of India and Pakistan. Goats often are raised in mountainous regions. They are excellent climbers and can find places to graze even in rocky terrain.

Ultimate Soft

Their fine, soft undercoat—known as down—is spun into yarn used to make knit and woven cashmere garments. The coarser outer guard hair of Kashmir goats, too rough for clothing, is perfect for upholstery and rugs.

The Real Thing

The word "cashmere" is often used to describe fabrics made from blends of cashmere and other fibers, such as sheep's wool. In the United States, laws require that clothing sold in stores be labeled with information about the content of each type of fiber, in order of percentage by weight. If an item is labeled "cashmere," it's made from 100 percent cashmere yarn or fabric.

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What is a Percheron?

DOMESTIC ANIMALS

1. A type of royal scepter
2. A draft horse originally from France
3. A fireplace tool

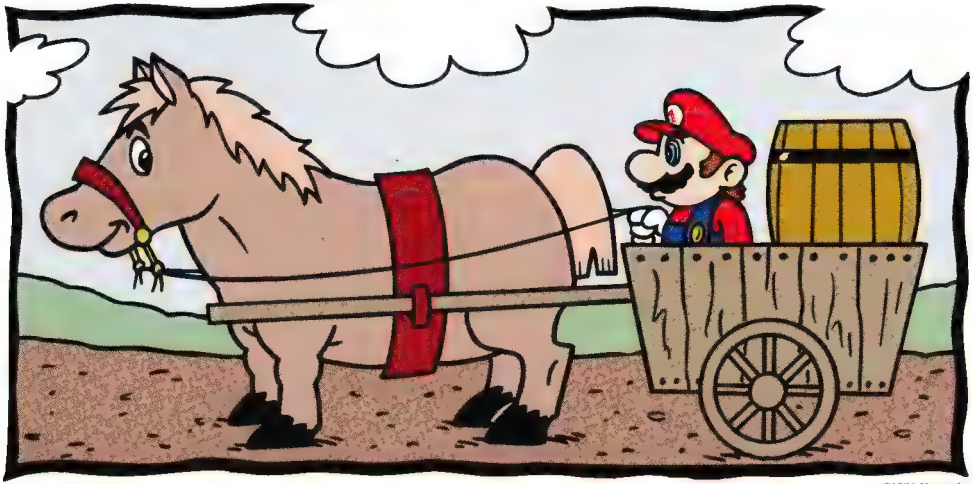

Illustration: Gary Fields

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Horses

While all horses belong to the same species—*Equus caballus*—humans have bred them to modify and enhance certain characteristics.

Horses are divided into three main categories, based on their physical features. Lightweight horses, lean and feisty, can attain high speeds at a gallop or trot. They excel at sporting competitions and hunting. Included in this category is the Arabian.

Ponies are sturdy and lively. The smallest are Shetland ponies, measuring about 3 feet (1 m) tall at the withers—the high point on a horse's back.

2 A Percheron is a draft horse which originated in Normandy, France.

© Stinset

For centuries, before the invention of motorized vehicles, draft horses pulled wagons and carts, stagecoaches, plows and other farm equipment.

The Percheron is a type of draft horse which originated in the region of Le Perche in Normandy, France. Draft horses are known for their muscular limbs and broad bodies.

Mighty Percherons

Percherons have a long history as war horses, coach horses, and farm horses. Percherons adapt easily to different climates and, they have been exported to many areas of the world.

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Do mounted horse guards still exist?

DOMESTIC ANIMALS

1 Yes

2 No

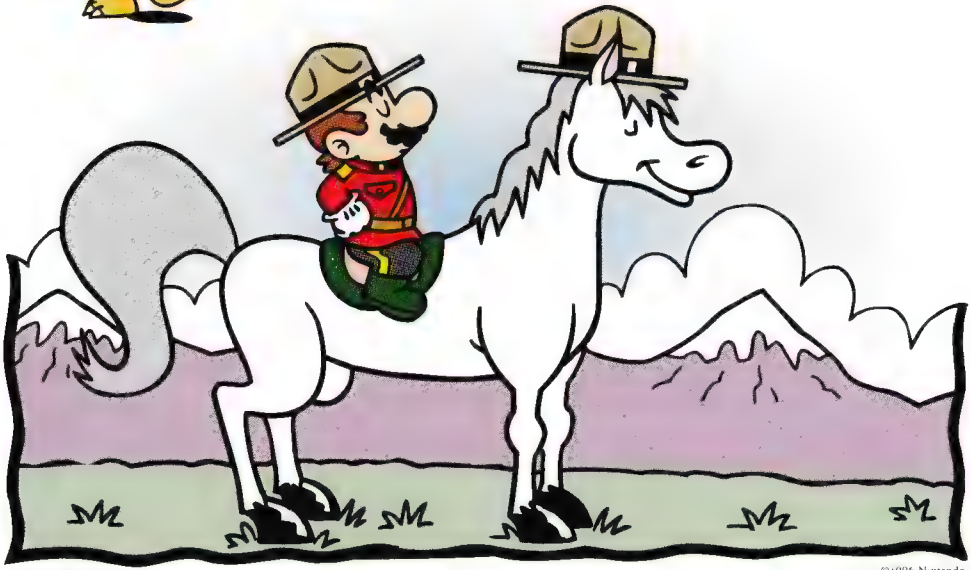

Illustration Gary Fields

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Mounted Horse Guards

Today's mounted horse guards include the Canadian Mounted Police, the French Republican Guard, and Britain's King's Troop of the Royal Horse Artillery.

1 Yes, mounted horse guards still exist today.

© Sunset

The French Republican Guard has been part of the police force since 1849.

Mounted Horse guards' duties include escorting government leaders, providing surveillance of state property, and participating in national parades and security missions. The King's Troop of the Royal Horse Artillery is one of the remaining mounted units of the British Army. The other is the Household Cavalry—the "Blues" and the "Royals"—which take turns guarding Buckingham Palace.

The Canadian Mounted Guard was established in 1873. Nicknamed the Mounties, it is part of Canada's federal police force. As the only authority in some of the more remote, desolate regions of Canada, the Mounties have a wide range of responsibilities. They performed surveillance duties while the Canadian Pacific Railway was being built in the 1880s and also helped early settlers with wilderness survival. Today, the Canadian police force relies on the Mounties for extra help and special services.

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How many pure breeds of cat are there?

DOMESTIC ANIMALS

1. Nearly 40
2. Nearly 75
3. Nearly 100

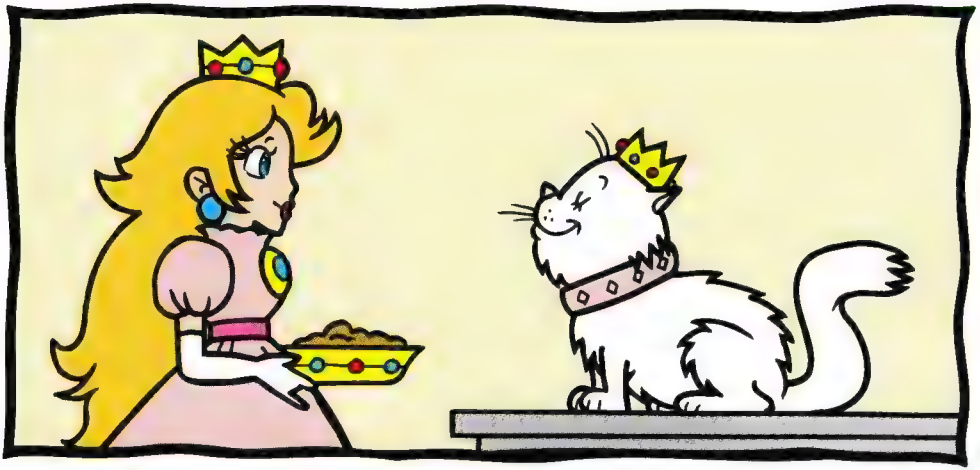


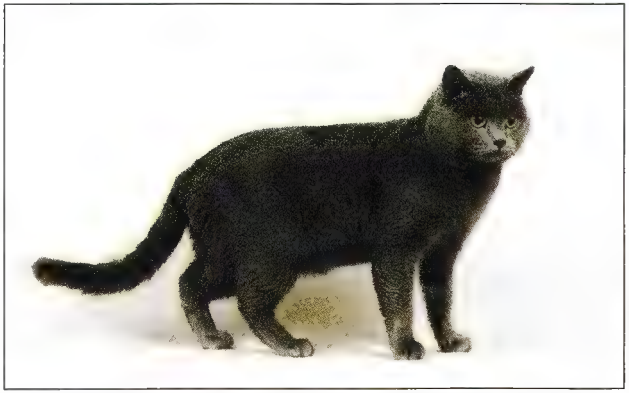
Illustration: Gary Fields

1986 Nintendo

Breeds of Cat

Most cats are short-haired, but they may be also short-tailed or even tailless, Their ancestors, tamed by the Egyptians over 3,000 years ago, did not have the variety of colors created by modern breeding.

1 **There are nearly 40 pure breeds of cat.**



© G. Lacz / Sunset

This is a chartreux. It is a French cat, known for its beautiful gray-blue fur.

It is thought that short-haired cats are descended from the African wildcat, tamed by the Egyptians, and that longhaired cats are descended from the Asian wildcat. All cats are similar in size, have excellent hearing, smell, and night vision, and a highly flexible body with retractile claws.

Coats of Many Colors

It is thought that the cat's original color was gray-ish-brown with stripes—or colors that blend easily into nature and help it hide (camouflage) itself while hunting. All other colors came from genetic mutations. Some breeds, such as the Siamese, developed in specific geographical areas. Some breeds, such as the Scottish Fold, are man-made, or enhanced. Cats which compete in shows must meet exacting standards for their breed, and there are even standards for mixed-breeds. Cats are also judged on health and temperament—no biting the judges!

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Why does a cat lick its fur?

DOMESTIC ANIMALS

1. To help it digest its food
2. To groom and soothe itself
3. To prepare for a territorial dispute

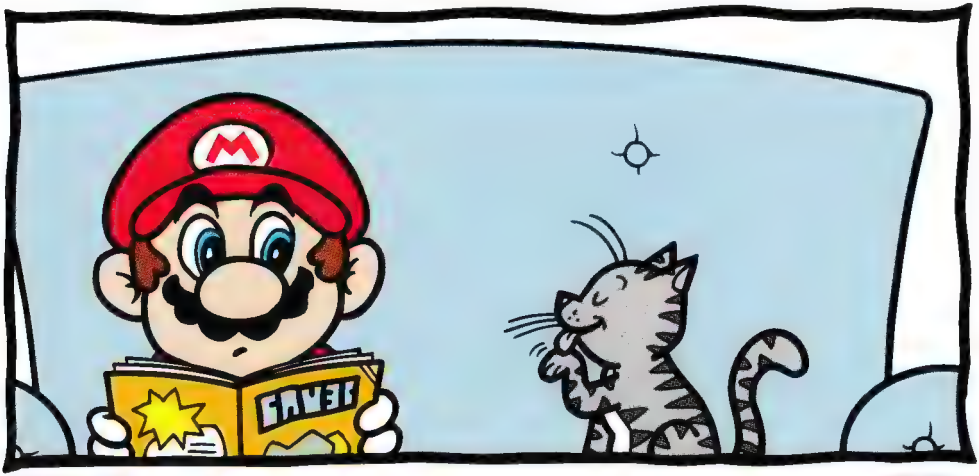

Illustration: Gary Fields

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Cat Grooming

Cats lick their fur to keep it clean and in good condition.

2 A cat licks its fur to groom and soothe itself.

© G. Laez / Sunset

The cat grooms itself—perhaps out of excitement—just prior to eating its freshly-killed prey.

Cleanliness is very important to cats. They hate to be dirty or wet. Unlike some other animals, they do not use their claws for grooming; for they are sharp, designed for scratching and scraping objects, marking territory, fighting, grabbing prey, climbing, and hunting. They use their tongues instead. The roughness you feel when a cat licks your hand is caused by many bumpy protuberances called papillae. They cover a cat's tongue, and help him to rasp (or scrape) his food and to groom himself.

Price of Beauty

Cats will spend an enormous amount of time grooming every day, and they are quite fastidious.

Problems can arise from so much grooming, however. When cats lick their fur, they swallow loose hair. That loose hair collects in hairballs which form in their stomachs and make them sick. That's why it is a good idea to brush cats often, especially if they are longhaired. They may also be given medication to prevent hairballs from forming.

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Are there still wild horses in the world?

DOMESTIC ANIMALS

1 Yes

2 No

Illustration: Gary Fields

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Wild Horses

At one time, the wild horse lived all over Eurasia north of the mountain chains. Today, there are only two breeds left.

1 **Yes, there are two breeds of wild horse left in the world.**

© Julienne / Sipa Press

At one time, wild horses inhabited much of Europe and Asia.

One of the breeds, the half-ass, includes the kulan in central Mongolia; the kiang in Nepal, Sikkim, and western Tibet, at elevations of over 14,000 feet (4,270 m); and the onager, an ancient species now endangered and living in the desert environment of Iran.

The second breed, the wild asses of India, are closely related to the half-asses. There are very few of these left, and they are believed to live in the Syrian desert.

Ponies of Chincoteague

There are still wild breeds in North America. The best known are the ponies that live on an island off the coast of Maryland called Chincoteague. Each year, some of the ponies are brought back to the mainland and domesticated. In the wild, horses live in herds. They feed mainly on grasses.

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Can leopards be trained by humans?

DOMESTIC ANIMALS

1 Yes

2 No

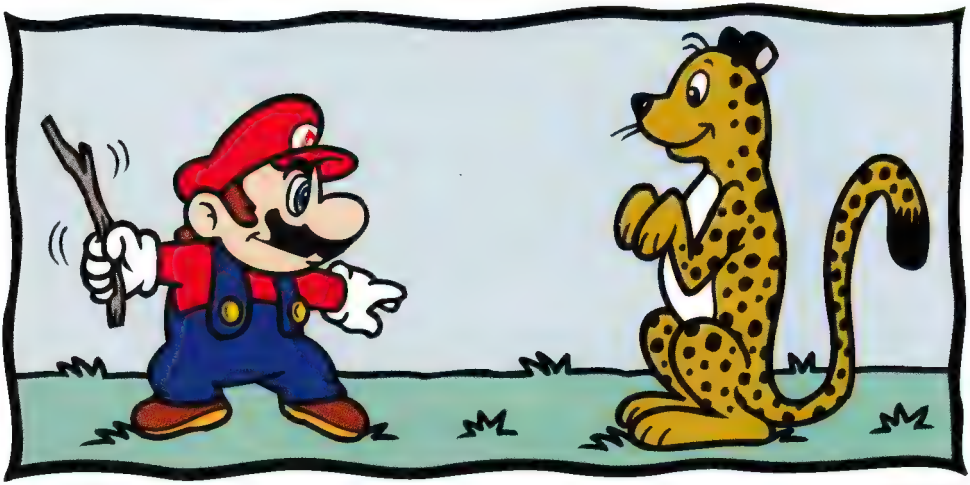

Illustration: Gary Fields

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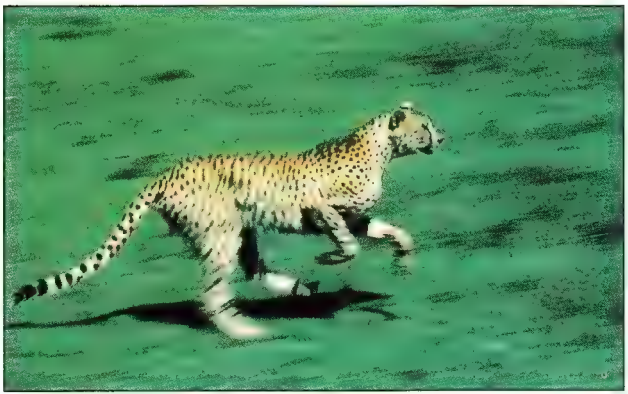
Leopard

Ancient Egyptians were probably the first people to train leopards. Leopard cubs were captured and used to hunt game birds.

1 Yes, leopards can be trained by humans.



© N.H.P.A. / Sunset

Leopards are among the fastest of all wild cats.

Leopards are large wild cats native to southern Asia and much of Africa. Usually they are tawny yellow with white underbellies and small black spots all over. Some leopards are entirely black and are known as black panthers. Leopards are solitary except during the mating season, which can happen at any time during the year. Females bear one to six cubs at a time. Leopard cubs remain with their parents until they are almost full grown.

Adaptable Hunters

Leopards are nocturnal, active only at night, in areas where they are hunted. Otherwise, they are active during the day, resting during the hottest part. To catch their prey, they often lie in wait, camouflaged by their coat, which is similar to the play of light and shadow. Then they leap on passing animals. Since they are so powerful, leopards can often carry a large kill up into a tree, safe from lions and hyenas which would try to steal it.

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What is a beagle?

DOMESTIC ANIMALS

1. Cross between an eagle and a buzzard
2. Small breed of domestic dog
3. Smooth-coated racing horse

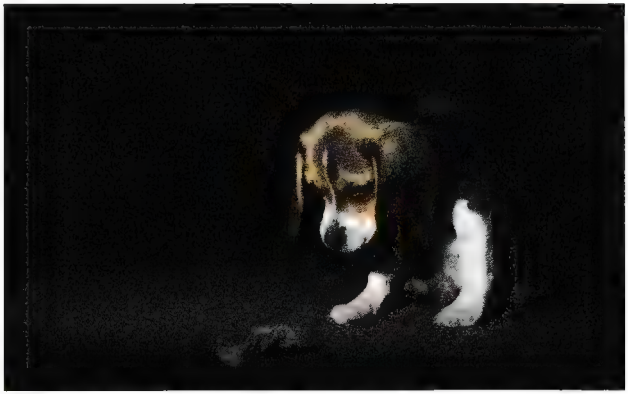
Illustration: Gary Fields

©1996 Nintendo

Beagle

Beagles are gentle, affectionate companions and skilled hunters. While their exact origin is unknown, beagles first appeared as a distinct breed in England during the 16th century.

2 Beagles are a small breed of domestic dog.



© Joe McDonald / Visuals Unlimited

Beagles have short legs and smooth white, tan, and black coats. They are similar in appearance to foxhounds, only smaller.

Beagles are *canids,* belonging to the same family as coyotes, wolves, jackals, foxes, and dingoes. Like all members of the dog family, beagles are carnivores, or meat-eaters. They have large canine teeth and blunt, nonretractable claws, unlike those of a cat. Canids also have highly developed senses of hearing and smell which make them excellent hunters at night as well as during the day.

Characteristics

Beagles are typically 12 to 16 inches (30 to 41 cm) tall at the shoulder. They have a long, slightly domed head and brown or hazel eyes. Beagles also have drooping ears, a straight, square-cut muzzle, sloping shoulders, and muscular hips and thighs. Their short tail has a small brush, or tuft of fur, at the end.

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Can hens and roosters fly?

DOMESTIC ANIMALS

1 Yes, hens and roosters can fly.

2 No, hens and roosters are flightless birds.

Illustration: Gary Fields

©1996 Nintendo

Domestic Fowl

Adult female domestic fowl are called hens, while adult males are known as roosters. Because both hens and roosters have large, heavy bodies and short wings, they cannot fly very far.

1 Yes, most breeds of hens and roosters can fly, but only over short distances.

© G. Lacz / Sunset

The skin on the top of a rooster or hen's head is called the comb, and the skin on the side is called the wattle.

Chickens, or domestic fowl, were one of the first animals to be domesticated. According to ancient Chinese documents, chickens were introduced to China in about 1400 B.C. Ancient Babylonian carvings of fowl date to 600 B.C. Early Greek authors, including the playwright Aristophanes, mentioned fowl in their writings. The Romans believed the chicken was the sacred animal of Mars, the god of war. Today, domestic fowl live all over the world and are raised for their eggs and meat.

Domestic fowl live on the ground where they find the food that makes up their diet—seeds, worms, insects, and greens. Most domestic fowl have four-toed feet adapted to scratching the earth. Roosters of many domestic fowl varieties also have long, colorful tail feathers.

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What noise do donkeys make?

DOMESTIC ANIMALS

1. Mew
2. Bray
3. Whinny

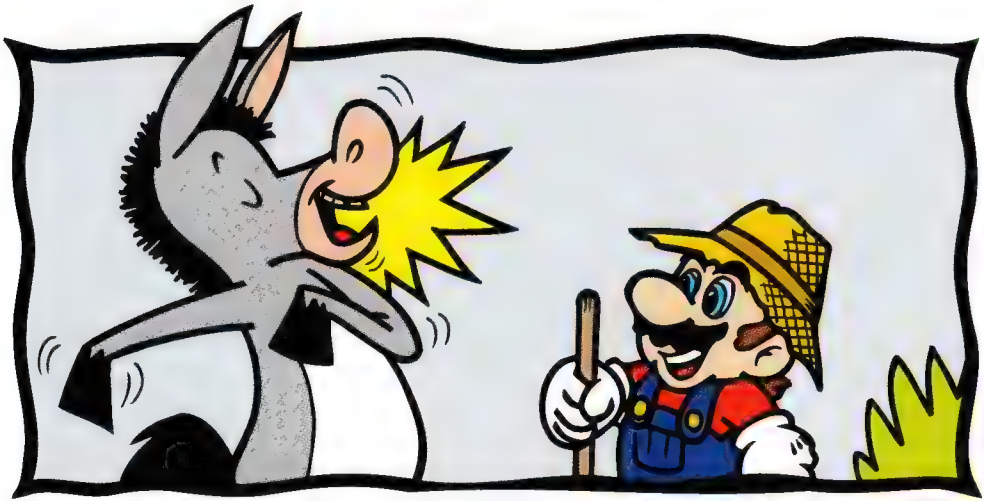

Illustration: Gary Fields

©1996 Nintendo

Donkey

Donkeys are related to horses. Although donkeys are smaller, they are very strong and can carry a heavy load or adult human over long distances. Donkeys are also sure-footed, making them better adapted to walking on steep trails.

2 **Donkeys make a loud braying noise.**

© G. Lacz / Sunset

Donkeys have long ears, slender legs, a tufted tail, and small hooves. Some types of donkey, such as the one above, have long, thick, wavy hair.

Donkeys were probably domesticated in about 4000 B.C. by the Egyptians. Domestic donkeys are, on average, about 4.1 feet (1.25 m) tall at the shoulder. They live longer than horses—generally from 25 to 50 years. Female horses bred with male donkeys produce mules. Female donkeys bred with male horses give birth to a hybrid called a hinny.

Wild Donkeys

African wild donkeys closely resemble domestic donkeys in size and appearance. The Asian wild donkey, native to desert regions of Mongolia, is a bit larger than the African species and has smaller ears. Most Asian wild donkeys have a reddish-brown coat, although some are yellowish or gray.

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What country produces the most wool?

DOMESTIC ANIMALS

1. France
2. Great Britain
3. Australia

Illustration: Gary Fields

©1996 Nintendo

Wool

Wool is the fleece, or furry coat, of a domesticated sheep. It is valued in the textile industry for its lightness, ability to absorb water, and insulating qualities.

3 Australia produces more wool than any other country.

© G Lacz / Sunset

Merino sheep produce large amounts of very thick wool. While the breed originated in the Mediterranean area, different types of merinos have been bred all over the world.

People probably first began domesticating sheep about 12,000 years ago. There are more than 400 different breeds of sheep that produce different types of fleece. Merino sheep produce a very high quality wool that many consider the best in the world.

Breeding and Shearing

Merino sheep are raised in the United States, Australia, Russia, South Africa, France, Germany, and Argentina. Australia produces about 29% of the world's supply of wool.

Sheep are shorn once a year, during the spring or early summer. Shearing may occur twice a year in warmer climates. The fleece is cut close to the skin with mechanical shears so it may be removed in one piece. One sheep produces, on average, about 10 pounds (4.5 kg) of wool each time it is sheared.

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Do cats have a good sense of balance?

DOMESTIC ANIMALS

1 No, cats cannot balance well.

2 Yes, cats have a good sense of balance.

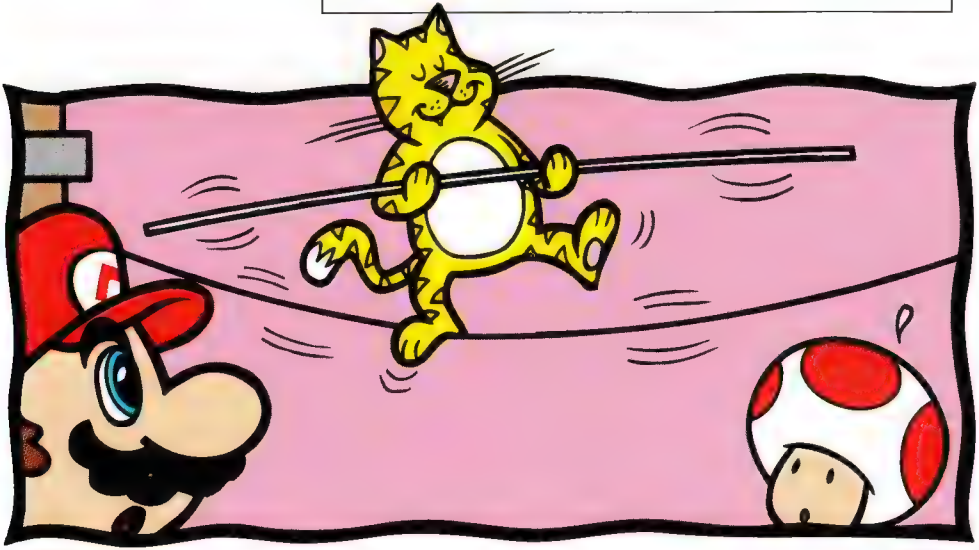

Illustration: Gary Fields

©1996 Nintendo

Balancing Act

Felines—members of the cat family—include lions, jaguars, ocelots, tigers, and domestic cats. All felines have lithe and agile bodies covered with soft fur.

2 Cats have a good sense of balance.

© G. Lacz / Sunset

Thanks to its extremely flexible backbone, a cat can flip over mid-flight to land squarely on its feet.

Cats have excellent hearing and vision, and sharp claws and teeth for grasping and tearing apart prey. All cats are carnivores, although they may occasionally supplement their diet with grass or other greens.

Cat Language

By observing a cat's movements and listening to the sounds it makes, you can often tell what mood it is in. A contented cat will purr and gently swish its tail, closing its eyes partway. Cats fold their ears back against their heads when they are angry or afraid. Another indication of fright or anger is hissing and raised fur on the tail and back.

Different kinds of cats have different voices. Siamese cats are one of the most talkative of the domestic breeds, producing very human-sounding moans and cries. Abyssinians use their voices sparingly, occasionally uttering what sounds like a soft chirp.

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Do dogs need to be vaccinated?

DOMESTIC ANIMALS

1 Yes, vaccinations help dogs stay healthy.

2 No, dogs are naturally healthy.

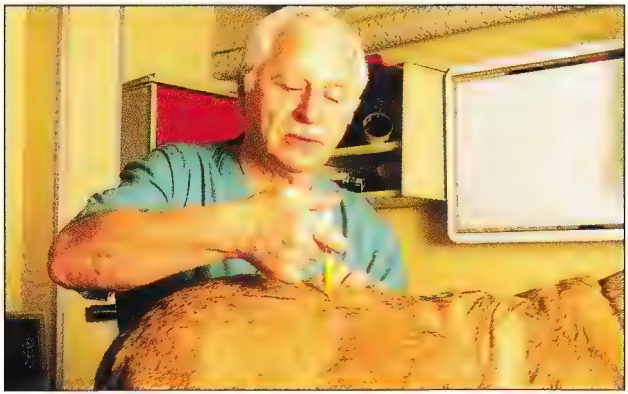
Illustration: Gary Fields

©1996 Nintendo

Dog Vaccines

If you have a pet dog you know it has to go to the veterinarian for shots. These vaccinations help keep the dog free of diseases.

1 Yes, dogs need to be vaccinated against canine diseases.



© G. Lacz / Sunset

A veterinarian, or animal doctor, will vaccinate your dog for eight different canine diseases.

Just as you go to the doctor to be vaccinated against diseases like measles and polio, your dog has to be vaccinated against diseases that could harm or even kill it. Dogs can be vaccinated for eight different diseases. The most dangerous of these is rabies, which is highly contagious. Dogs and people can be infected with rabies if they're bitten by an animal that has it. That's why it's important for your dog to have rabies shots, especially if it spends time in the woods with animals like raccoons and skunks, which may carry rabies.

An Ounce of Prevention

Shots don't hurt the dog much, and it's a necessary step toward keeping your dog healthy every day. Puppies usually receive their first vaccinations when they're 6 to 8 weeks old. A second round of shots is done at about 12 weeks, and a third at 16 weeks. After that, dogs should receive booster shots once a year.

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Which dogs are used for rescue missions?

DOMESTIC ANIMALS

1. Poodles
2. German Shepherds
3. Great Danes

Illustration: Gary Fields

©1996 Nintendo

Rescue Dogs

With their keen sense of smell, German Shepherds help police and rescue workers find people who are trapped in avalanches, earthquakes, and other disasters.

2 German Shepherds are used to rescue people in disasters.

© G. Lacz / Sunset

Rescue dogs and their masters work as a team. Because they're smart and have a keen sense of smell, German Shepherds make excellent rescue dogs.

German Shepherds are smart, strong and energetic. They're great dogs to count on in an emergency, and they can be trained to help save victims of disasters.

Catch the Scent

After an earthquake or avalanche, everything is covered with debris, rocks, or snow. Buried in the wreckage are people who need to be rescued. The tricky part is finding them. That's where the rescue dogs come in. German Shepherds don't need to see a person to know she's trapped beneath the rubble. They can sniff her out! Once the dog has located a victim, it digs until the victim can be freed.

Tough Training

It takes about a year and half to train a rescue dog. Besides learning to find victims, the dogs have to become accustomed to rescue conditions. Dogs used in avalanche rescues are even trained to ride chair lifts up mountains to disaster areas.

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Is a dog's hearing more acute than a human's?

DOMESTIC ANIMALS

1. Yes, dogs can hear better than humans can.
2. No, humans hear better than dogs do.

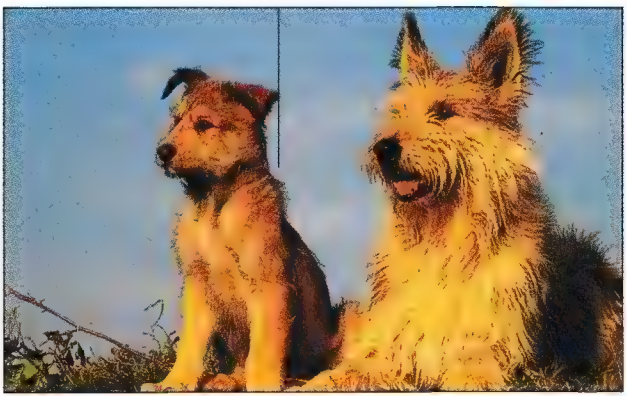
Illustration Gary Fields

©1996 Nintendo

Dogs' Hearing

Dogs can hear sounds above and below the frequencies that are perceptible to the human ear.

1 Yes, a dog's hearing is more acute than a human's.



© G. Lacz / Sunset

A dog's ears change shape and orientation to help it detect sounds.

Have you ever been with a dog when a fire siren has sounded? To you, the siren might seem loud or irritating, but the high-pitched sound of the siren will make the dog howl in pain. That's because a dog's hearing is extremely sensitive to high-pitched noise. A dog's hearing is so sensitive, it can detect sounds at great distances—four times farther than humans can.

Mobile Sound System

A dog's ears actually work to collect sounds—changing shape and position to funnel sounds into the ear canal. When it senses a noise or disturbance, a dog might prick up one ear as a sort of sound detector. Then the second ear will go up to capture the maximum number of sound waves. It takes the slightest fraction of a second for a dog to identify the source of a sound.

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Which animal is related to the llama?

DOMESTIC ANIMALS

1. Alpaca
2. Antelope
3. Argali

Illustration: Gary Fields

©1996 Nintendo

Alpaca

Both the alpaca and its cousin, the llama, live in the Andes Mountains of South America. Alpacas have been domesticated. They're bred by ranchers.

1 The alpaca is related to the llama.

© G. Holton / PHR / Jacana

Alpacas are herbivores. They graze on the high plains of the Andes Mountains in Peru and Bolivia.

Woolly little alpacas are raised for their long-haired coats. Ranchers clip the alpacas' hair, similar to the way sheep ranchers shear their sheep. Then the alpaca hair is spun into fine, warm yarns and cloth. The hair of the vicuna, a wild relative of the alpaca, is also used to make yarn and woolen fabric.

Mountain Dwellers

Alpacas grow such long, luxurious coats because they live in cold mountain climates of Peru and Bolivia. They can be found at elevations as high as 15,800 feet (4,800 m). To survive on the rocky terrain of such high altitudes, alpacas have to be light and nimble. They only grow to be about 3 feet (94 cm) tall at the shoulder and they typically weigh about 130 pounds (58.5 kg). Their feet are dainty, and their toes have flexible pads that help them walk on rocks and gravel.

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Which dogs are used to pull sleds?

DOMESTIC ANIMALS

1. Alaskan Malamute
2. Dalmatian
3. Lhasa Apso

Illustration Gary Fields

©1996 Nintendo

Alaskan Malamutes

Different breeds of dogs have different natural characteristics and personalities. Alaskan Malamutes are naturally skilled as pulling dogs.

1 **Alaskan Malamutes are used to pull sleds.**

© R. Benali / Gamma

Have you ever wondered why dog sled drivers supposedly yell "Mush!" to make their dogs run? French explorers in the Canadian wilderness used to drive their dogs by saying "Marche en!" which means "go ahead." English explorers thought they were saying "mush," and the term stuck!

For centuries Eskimos have used dog sleds as the best way to travel over long stretches of snow-covered ground. Sled dogs have to be strong to pull sleds through the cold, harsh Arctic. They're smart and brave, and hard-working, too. The world's most famous dog sled race, the Iditarod, was created to honor the heroic dog sled teams that carried diphtheria serum from Anchorage, Alaska, to Nome, Alaska, in 1925. Each year, dog sled teams race along the same 1,049-mile (1,678 m) route. The race lasts at least two weeks.

Teamwork

Sled dogs usually pull in teams. Each team has a lead dog which runs at the head of the group and is usually the fastest and most obedient. The lead dog is the best at finding a trail—even in blinding snow.

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What is a stallion?

DOMESTIC ANIMALS

1. A male horse used for breeding
2. A farm building where horses are kept
3. A mixture of grain to feed horses

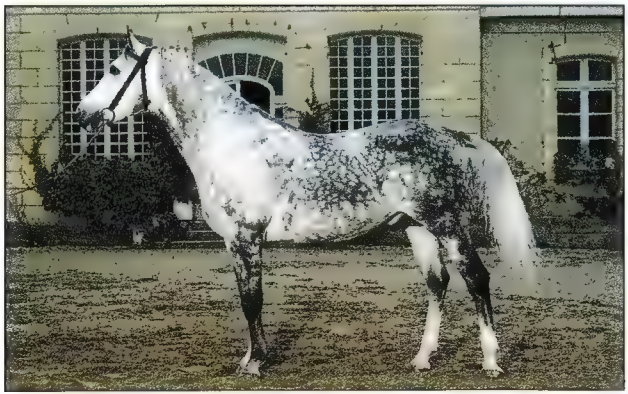
Illustration: Gary Fields

©1996 Nintendo

Horse Breeding

Horse breeders mate horses with desirable physical characteristics, such as strength, size, or color. Male horses used for breeding are called stallions. Female horses are mares.

1 **A stallion is a male horse used for breeding.**



© Ferrero / Jernean

Horses are bred for strength, speed, and size. This beautiful dapple gray stallion might also be bred for his uniquely colored coat.

Baby horses, called foals, produced by a mare and a stallion should carry some of the characteristics of their parents. For example, mating a stallion and a mare that are exceptionally fast runners should produce a speedy foal.

Racing Bloodlines

Horse-breeding is especially important in horse-racing. Race horses known as Thoroughbreds were originally the offspring of Arabian stallions and English mares.

Today, Thoroughbred to Thoroughbred breeding is done as well. A stallion that produces winners will be bred again and again. When its offspring are old enough, they are bred, too, thereby passing desirable traits down through generations. This can go on for hundreds of years. It is said that all standardbred horses—the ones used in harness races—can trace their bloodlines to Hambletonian 10, a race horse that lived 200 years ago!

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Which bird is kept as a pet by humans?

DOMESTIC ANIMALS

1. Hummingbird
2. Mynah
3. Thrush

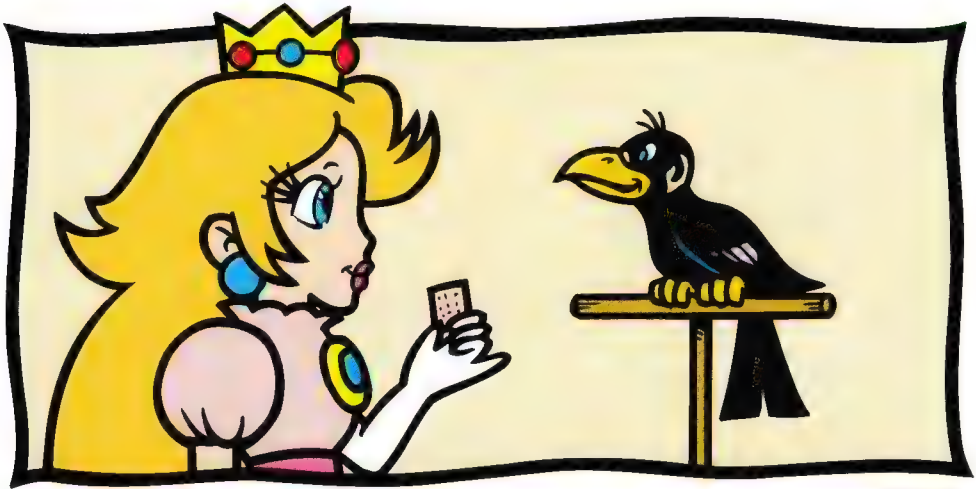

Illustration: Gary Fields

©1996 Nintendo

Mynah

The mynah bird is native to the Asian countries of India, Thailand, and Indonesia. It is best known for its ability to "talk."

2 The mynah bird can be kept as a pet by humans.

© G. Lacz / Sunset

The mynah bird has an ordinary appearance, but an extraordinary talent for talking!

Mynah birds have been kept as pets for generations. They grow to be about 10 inches (25 cm) tall, and have shiny black feathers and yellow-orange beaks and feet. Their one unusual marking is a bright yellow fold of skin, called a wattle, located behind each eye. Besides bird food pellets, caged mynah birds usually eat fruit like apples and grapes. Based on its appearance, the mynah bird doesn't look like anything special. But wait until it makes noise!

Great Impersonator

Mynahs are the great imitators of the bird world. Though parrots are better known as talking birds, mynahs are better mimics. When the birds are about a year old, they begin imitating the sounds they hear. They mimic the cries of other birds, and can imitate the sound of the human voice as well. Of all mynah species, the Greater Hill Mynah is the best talker.

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Is a peacock male or female?

DOMESTIC ANIMALS

1 Male

2 Female

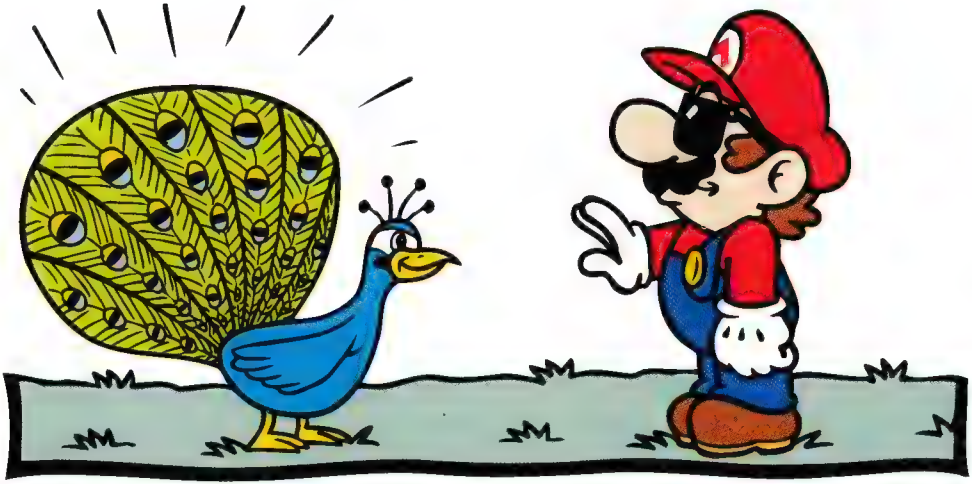

Illustration: Gary Fields

©1996 Nintendo

Peafowl

Peafowl are birds that are related to pheasants. The male of the species is called a peacock and the female is called a peahen. Collectively, they are known as peafowl.

1 **The peacock is male.**

© G. Lacz / Sunset

Peafowl live in the wild in India, Sri Lanka, Indonesia, and Myanmar. They also have been domesticated all over the world. The markings on the peacock's tail look like thousands of staring eyes.

The huge, showy tail of the peacock makes him easy to recognize. A peacock's tail contains about 200 feathers and grows to be 60 inches (150 cm) long. Females are about the same size as males, but they don't have brilliantly colored tails. Depending on the species, the birds' bodies may be blue or green.

Shall We Dance?

The male bird's tail is part of a peculiar ritual he uses to attract a female mate. Ordinarily, the male's extravagant tail feathers are tucked away, but when he sees a female, he shakes his rear end to fan out the feathers. The shaking creates a noise and a commotion the female can't miss.

When a female approaches, the male turns suddenly and dazzles her with the full brilliance of his tail. When she stands still, he continues the mating ritual by rushing at her and virtually wrapping her up in his tail feathers.

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Can dogs swim?

DOMESTIC ANIMALS

1 Yes

2 No

Illustration Gary Fields

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Rescue Dogs

Retrievers and hunting dogs are able to swim out into lakes and rivers to collect game birds their owners have killed. Other breeds can be trained to rescue people and to search for victims of drowning.

1 Yes, dogs can swim.

© G. Lacz / Sunset

Dogs like these Newfoundlands are trained to rescue injured swimmers and carry them to safety. Other dogs are trained to search for the bodies of drowning victims.

Though it once was believed that dogs couldn't detect human scents in the water, this theory has been proved wrong. Today, dogs are an important part of water rescue teams. Even underwater, humans give off a scent that dogs sense. A dog's nose can be a highly reliable search tool.

Underwater Search

Search and rescue dogs work from boats, the shore, or while swimming in the water. They're trained to detect a human scent and alert their handlers. Once a dog has detected and alerted, a second dog might be sent out to confirm the first dog's find. Then divers are sent underwater to recover the victim. It can take thousands of hours of work to train dogs for underwater search and rescue. Many people who train dogs are volunteers who do the work for free.

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What type of animals are most often used in caravans?

DOMESTIC ANIMALS

1. Decapods
2. Dogs
3. Dromedaries

Illustration: Gary Fields

©1997 Nintendo

Caravan

A caravan is a group of traders or merchants who travel together for protection. Some people in the Middle East and North Africa travel in caravans today.

3 **The dromedary, a type of camel, is the animal most often used in caravans.**

© B. Guter / Explorer

Nomadic traders in the Middle East and North Africa may travel in caravans.

Before trucks, trains, and other modern means of transportation were developed, traders in Asia and North Africa traveled long distances on foot to carry goods from one city to the next. Even on the routes they knew well, they never were sure what hazards they might encounter—foul weather, illness, injury, even robbers. So, it made sense for them to travel in groups that could provide help and protection. The name caravan comes from the Persian word *karwan.*

Beast of Burden

Dromedaries are excellent caravan animals because they can carry heavy loads for long distances, and they don't require much food or water during the journey. Their load is usually divided in half and hung on either side of the hump. They can carry between 350 pounds (160 kg) and 1,000 pounds (450 kg), depending on the difficulty of the trip.

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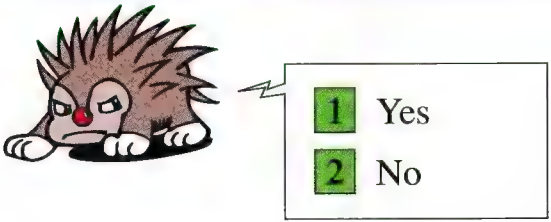
Is it true that elephants have excellent memories?

DOMESTIC ANIMALS



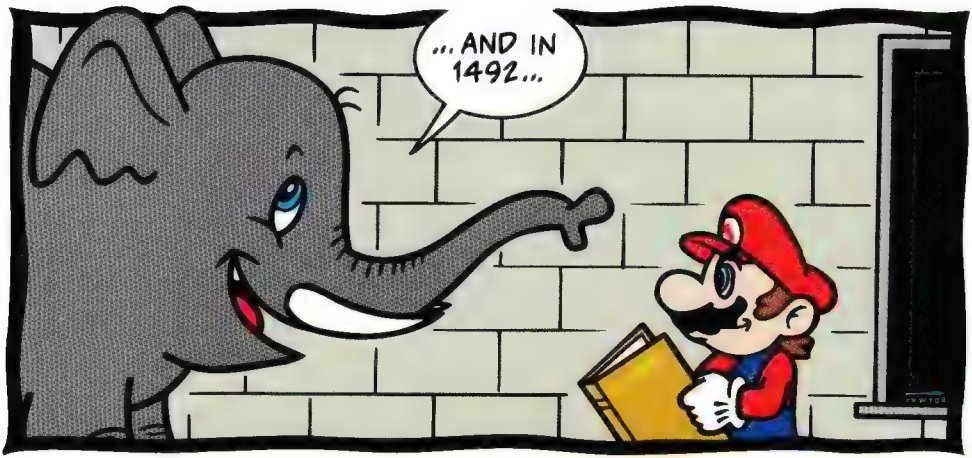


Illustration: Gary Fields

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Elephant Memory

Has anyone told you that you have a memory like an elephant? If they have, they were paying you a compliment. An elephant has an excellent memory.

1 Yes, elephants have excellent memories.

© G. Lacz / Sunset

Elephant trainers, sometimes called mahouts, don't work with baby elephants. An elephant that will be trained for work or the circus begins training when it is about 10 years old.

People can train elephants to do work and perform tricks because elephants have a natural skill for remembering what they learn. Asian elephants are slightly easier to train than African elephants. Most of the elephants that perform in the circus are Asian. In the Asian countries of Myanmar, India, and Thailand, elephants are trained to do work. They're commonly used in the logging industry to carry heavy tree trunks out of the woods.

School Days

An elephant has to be at least 10 years old before it can be trained. In most cases, elephants are born in the wild and captured for training when they're about 10. Even though the elephants are smart and agreeable to work with, training takes years. A trained elephant isn't ready to begin working until it is about 20 years old.

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How long is a hamster's gestation period?

DOMESTIC ANIMALS

1. 16 days
2. 1 month
3. 6 months

Illustration, Gary Fields

©1997 Nintendo

Hamsters

A gestation period is the period of time between when a female becomes pregnant and when she gives birth. For hamsters, the gestation period is just 16 days.

1 **Hamsters have a gestation period of 16 days.**

© Sunset

A female hamster can give birth to a litter of baby hamsters once a month.

You can understand how short a period of time this is when you consider that it takes two months for puppies to be born, nine months for a human baby to be born, and more than 18 months for baby elephants to be born!

Happy Hamsters

Hamsters are members of the rodent family—related to mice and rats. They can be found in the wild in Europe, Asia, and North Africa. The hamsters people keep as pets are called golden hamsters. They are descendants of wild hamsters found in the Middle Eastern country of Syria.

In the wild, hamsters eat grain and seeds. They like to burrow into the ground where they build long tunnel systems with different chambers for food storage, nesting, and hibernation.

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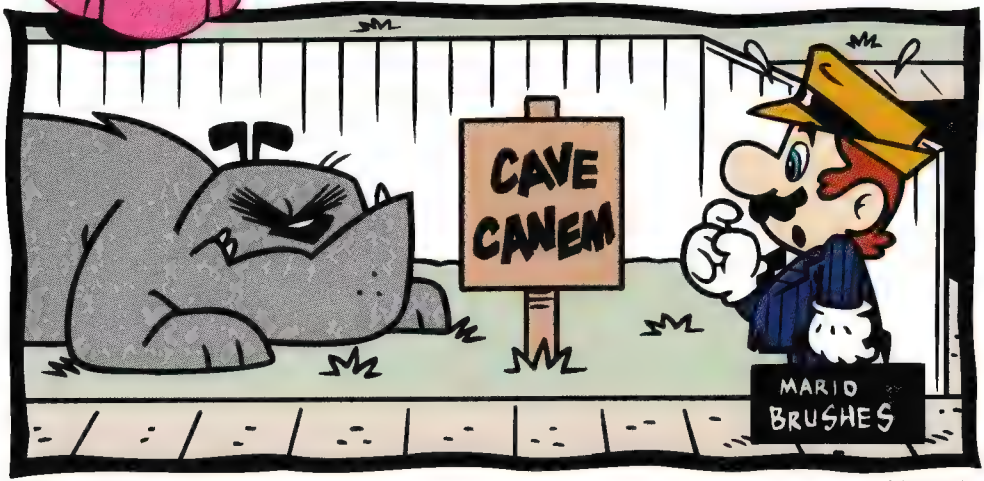
What does *cave canem* mean?

DOMESTIC ANIMALS

1. Beware of Dog
2. Horse for Sale
3. Welcome Home



Illustration, Gary Fields

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Guard Dogs

Archaeologists know ancient Romans kept guard dogs. Among the ruins of the Roman city Pompeii, they found signs reading *cave canem*—"Beware of Dog."

1 *Cave canem* is Latin for "Beware of Dog."

© Sunset

The Bullmastiff is an outstanding guard dog, however it requires years to train these tough dogs for their jobs.

Ancient Romans kept dogs as pets, as working animals, and for protection. Strong dogs, like Mastiffs, were trained as guard dogs. They could bark a warning and attack intruders. They even were used in combat.

On Guard

Over the years, some dogs have been bred especially as guard dogs. The Bullmastiff, a cross between a British Bulldog and a Mastiff, was first bred in England in the 19th century. Like Bulldogs, they're hard-working and stubborn. Like Mastiffs, they're strong, fast, and have an excellent sense of smell.

Poacher Beware

Bullmastiffs were used to keep poachers—unauthorized hunters—from going onto the grounds of private estates to hunt. The dogs were trained to find and chase poachers. Their job wasn't done until the poacher was knocked down and caught.

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What do horses eat?

DOMESTIC ANIMALS

1. Grass and grain
2. Meat
3. Both

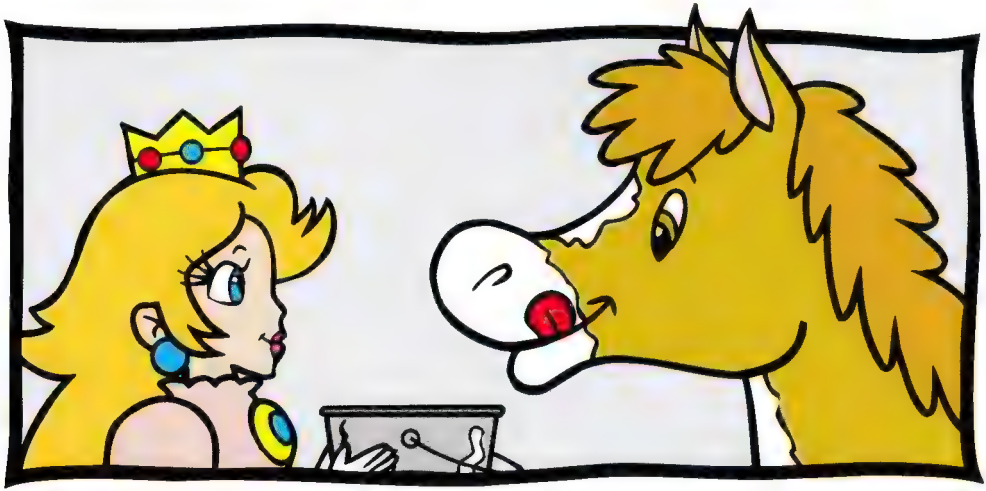

Illustration: Gary Fields

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Horses

Many horses survive on a diet of grass, which they consume while grazing. Horses that work need feed, made from hay and grain, to give them extra energy.

1 Horses eat grass and grain.

© G. Lacz / Sunset

Young horses may receive all the nutrients they need from a diet of grass. Working horses and race horses require extra energy to help them perform at peak levels.

A horse generally eats about 2 pounds (1 kg) of grass or feed for every 100 pounds (45 kg) of body weight. So a young horse, or pony, which weighs 300 to 850 pounds (135-380 kg) might eat between 6 and 16 pounds (3-8 kg) of food each day. Full-grown horses weigh 800 to 1,300 pounds (360-590 kg) and working horses, also known as draft horses, weigh about 1,500 to 2,600 pounds (700-2,000 kg).

Digestion

A horse's stomach is relatively small for the animal's size. Food passes quickly through the stomach, into the small intestine. Most of the horse's digestion takes place in its huge large intestine. Here the food is broken down and the nutrients extracted. Food may stay in the horse's large intestine for more than two days while it is being digested.

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What is a female pig called?

DOMESTIC ANIMALS

1. Cow
2. Pow
3. Sow

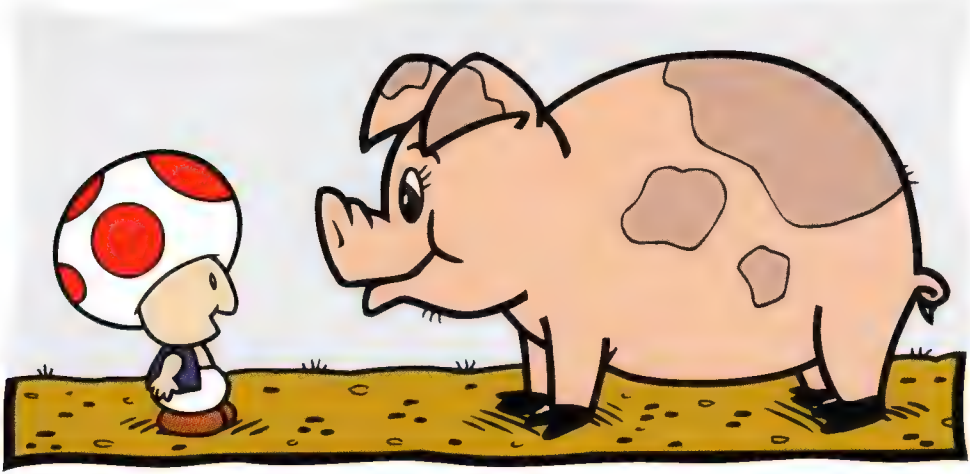

Illustration: Gary Fields

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Pigs

Pigs are not especially dirty animals. They wallow in mud to keep cool in hot weather. The mud also keeps away lice, parasites, and stinging insects.

3 A female pig is a sow.

© Superstock

A female pig, or sow, commonly has litters of 6 to 14. The young nurse for about 3 months and stay with their mother for about a year.

It's true that pigs are not picky eaters. Wild pigs eat just about anything—roots, leaves, lizards, rats—even the remains of dead animals. Farm-raised pigs are usually fed grains and vegetables, as well as table scraps and other food waste.

Brain Power

Some people keep domesticated pigs as pets. The miniature Vietnamese potbellied pig, which grows to be about 14 inches (35 cm) tall and to weigh 50 to 150 pounds (23-68 kg), is a popular house pet. Pigs are among the smartest of animals. In fact, studies have shown that pigs are more intelligent than dogs.

True Colors

There are more than 350 types of pigs. Most domestic species are raised to provide meat. Not all pigs are pink. The Chester White and Landrace are pure white. The Berkshire is black with white feet.

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Do horses have to be trained to carry riders?

DOMESTIC ANIMALS

1 Yes

2 No

Illustration Gary Fields

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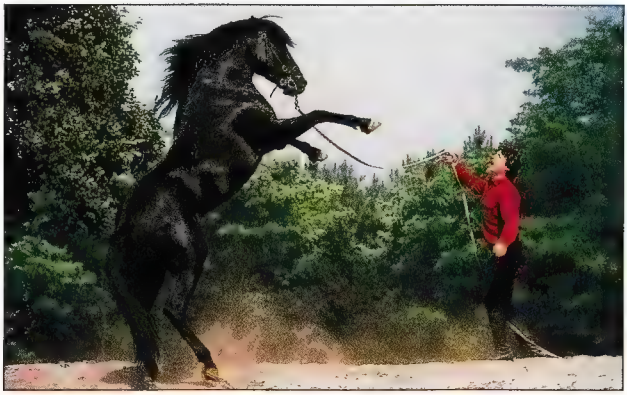
Horse Training

A horse's natural reaction to a saddle or rider on its back would be to try and shake it off. Horses must be trained to wear saddles and carry riders.

1 Yes, horses have to be trained to carry riders.



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Horses are trained for a variety of purposes, such as racing, show-jumping, or working on ranches or farms. They may even be trained to entertain in the circus or to perform in movies. This trained horse rears up on its hind legs on a verbal command from its trainer.

Training a young or wild horse to wear a saddle and carry a rider is known as "breaking." This used to involve repeatedly forcing the horse into an uncomfortable position until the horse was too tired to resist. Breaking worked by humiliating the horse and breaking its spirit.

Kind Treatment

Today, most horse trainers train horses by kinder means. On horse farms, a baby horse is fitted with a halter, a type of head collar, days after it's born. Soon the foal will allow itself to be led by the halter. The more accustomed the horse is to being handled by humans, the easier training becomes. Most horse training is done by rewarding desired behavior until the horse learns what is expected of it. By the time they are three years old, most domesticated horses have learned to carry a saddle and rider and to respond to verbal commands.

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What is a kennel?

DOMESTIC ANIMALS

1. A place where dogs are bred and housed
2. A type of dog food
3. A breed of dog

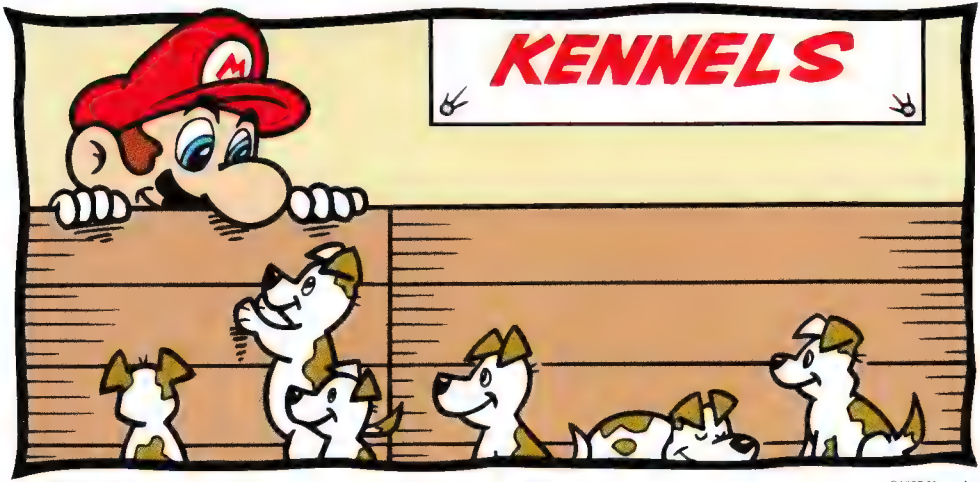

Illustration Gary Fields

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Kennel

Many people buy purebred puppies directly from dog breeders who operate kennels.

1 A kennel is a place where dogs are bred and housed.

© G. Lacz / Sunset

People who work in kennels have to love dogs. They must be able to identify a dog that is sick or uncomfortable and make sure it receives proper care. A high-quality kennel is clean and orderly, with comfortable cages and plenty of space for dogs to run and play.

People who breed dogs professionally need a large comfortable place for their dogs to live. That's what a kennel is. In most kennels, dogs sleep in individual cages, but they're allowed to run in a fenced area and socialize with other dogs during the day.

Dog Hotel

Certain kennels, known as boarding kennels, are created specifically to house dogs for limited periods of time. They're like hotels for dogs. When a dog's owner will be away from home for a length of time, the owner might board the dog at a kennel where it will be fed and cared for. At boarding kennels, dogs spend most of the day in individual cages. They're taken out for runs individually. This help prevent fights that might occur between dogs that are unfamiliar with each other.

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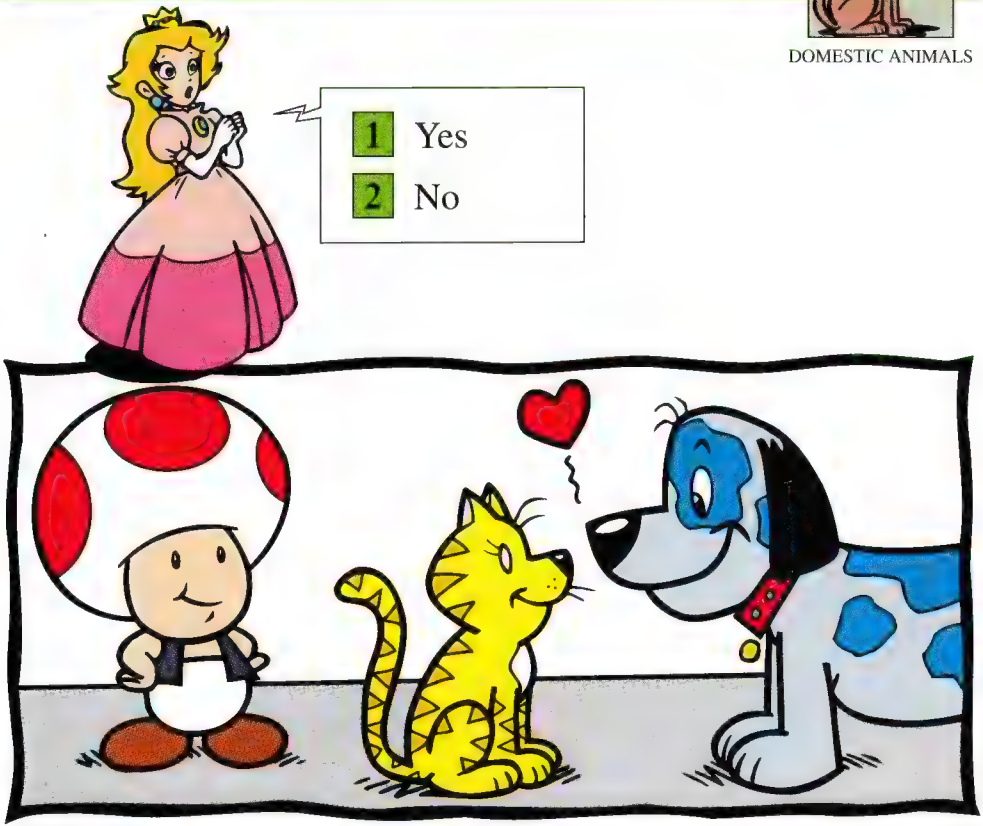
Are dogs and cats natural enemies?

DOMESTIC ANIMALS



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Dogs and Cats

Forget what you see in cartoons! Dogs and cats can live together happily. Many families keep both dogs and cats as pets.

2 No, dogs and cats are not natural enemies.

© G Lacz / Sunset

When puppies and kittens grow up in the same house together, they often become great friends.

The easiest way for a dog and cat to live together is if they both grow up in the same place together. It's easier to train a puppy and kitten to be friends than it is to convince an adult dog to appreciate a delicate kitten, or an adult cat to live with an energetic puppy.

The trick is getting the older animal to accept that another animal is going to be sharing its space (and your attention).

My Home is Your Home

Veterinarians and animal care experts can teach pet owners how to train the animals to live together. This often involves keeping the animals in separate rooms so they can get used to each other by smell before they meet face to face. When any creatures—even humans! —live together they occasionally annoy each other. So, dogs and cats who live together may sometimes fight, but once they become used to each other, they often develop into great pals.

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Where were goldfish first kept as pets?

DOMESTIC ANIMALS

1. China
2. Egypt
3. Kenya

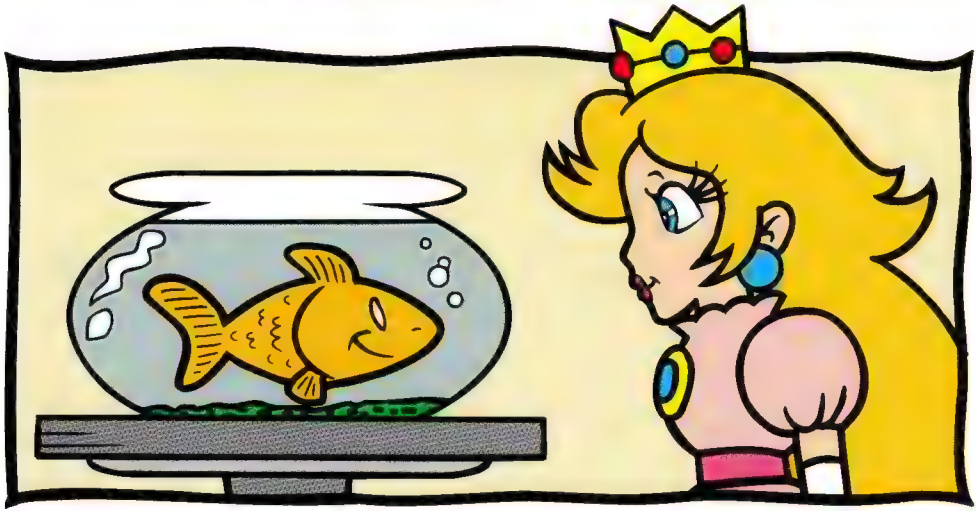

Illustration Gary Fields

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Goldfish

Not all goldfish are golden or orange-yellow in color. They may be white, black, gray, brown, or even spotted.

1 Goldfish were kept as pets in ancient China.

© Monterey / Sunset

In Chinese, the word for goldfish is similar to the words meaning "abundance of gold." Giving a newly married couple a pair of goldfish as a wedding gift means that you wish them a prosperous life together.

Goldfish are related to carp, and they're native to East Asia. Since ancient times, they have been kept as pets. They were first domesticated in China.

It's possible for pet goldfish to live as long as 25 years, but their life span is usually much shorter.

Green Fish, Gold Fish

Despite its name, the goldfish is naturally greenish-brown. In the wild, goldfish are dull in color.

Selective breeding has produced the golden orange fish we know today. It has also created about 125 varieties of goldfish. The lionhead, for example, has a mane-like hood around its head. The veiltail has a long, flowing tail.

Fish Food

Goldfish feed on plants and tiny animals. They also like to eat bugs, and in captivity they will eat grain-based food.

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Which is a doctor who cares for animals?

DOMESTIC ANIMALS

1 Vertebrate

2 Veteran

3 Veterinarian

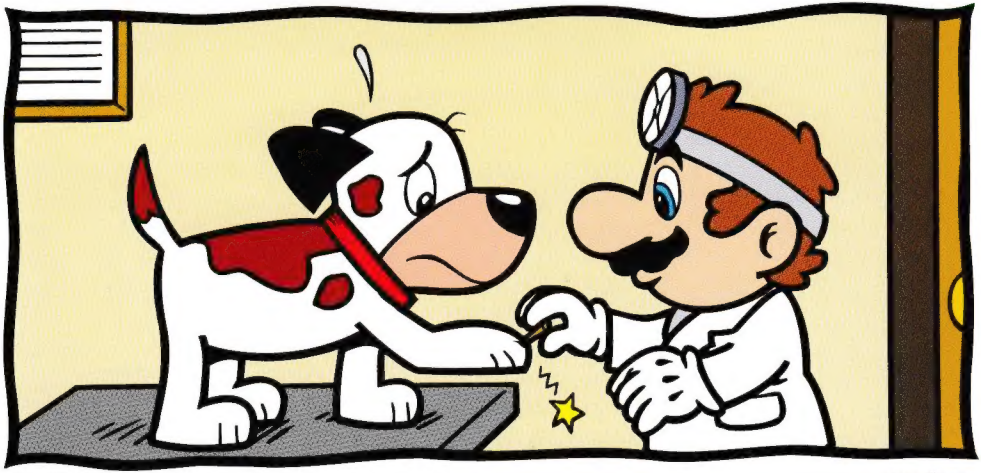

Illustration: Gary Fields

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Veterinarian

A veterinarian holds a specialized medical degree: D.V.M., or doctor of veterinary medicine.

3 A veterinarian is a doctor who cares for animals.

© G. Lacz / Sunset

A vet may be present when large animals give birth. The little colt in this picture is less than one hour old!

A veterinarian diagnoses and treats animal diseases, and provides examinations, inoculations, and medications to keep animals healthy. If you have pets, such as dogs and cats, you know that they must visit the vet periodically for checkups and shots.

Great and Small

Vets who treat domestic animals usually specialize in large or small animal care. The vet who treats your dog or cat is a small animal specialist. Large animal specialists work with horses, cows, sheep, and other livestock. These large animal specialists are vital to ranchers, farmers, and breeders.

In the Wild

A few vets specialize in the treatment of wild animals. Very often, these vets conduct zoological research as well as perform examinations and treatments. They may work for zoos, or as part of scientific research teams in the wild.

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Which breed of cat is known for having blue eyes?

DOMESTIC ANIMALS

1. Manx
2. Russian Blue
3. Siamese

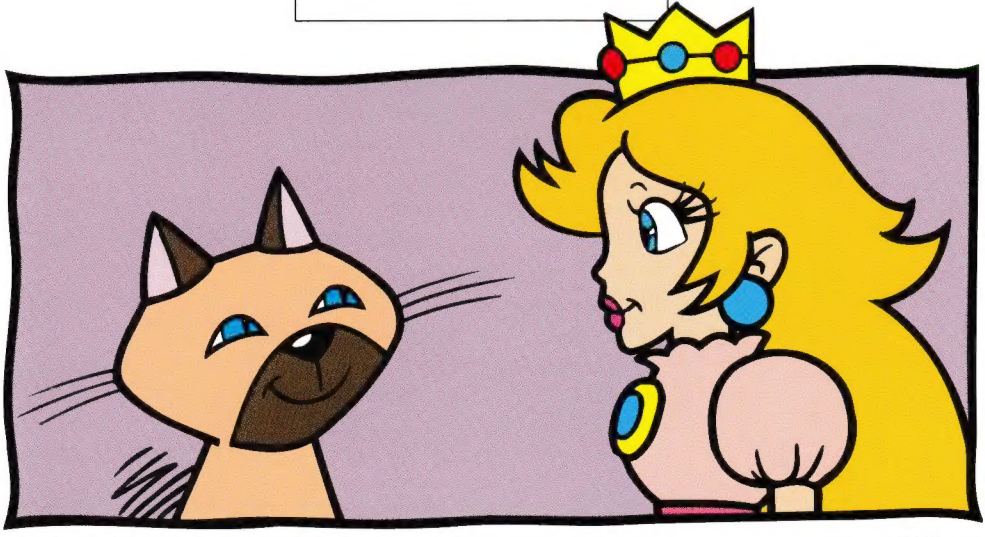

Illustration: Gary Fields

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Siamese Cats

You can recognize a Siamese cat by its brilliant blue eyes and unique coloring —a light or white body with a dark "mask," ears, feet, and tail.

3 Siamese cats are known for having blue eyes.

© Len Sirman

The Siamese is one of the most popular breeds among pet owners.

The Siamese cat is named for the kingdom of Siam, where the breed originated. (Today, Siam is known as Thailand.) They were the favorite pets of Siamese royalty, and it's said that Siamese cats were introduced to the United States when the king of Siam gave one as a gift to an American friend in the 1890s.

Siamese cats are short-haired and sleek, with graceful bodies, small heads, and large ears.

Color Points

The colored parts of the cat's body and face are known as points. In kittens, the points are only slightly darker than the rest of the body. As the cat matures, the points become more distinct from the body color.

Interestingly, environment affects the Siamese cat's coloring. The cats who live in cold regions tend to have darker fur than those who live in warm regions.

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